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Editorial

In order to improve the nature of the Indian education sector, the present government has presented a comprehensive National Education Policy 2020 (NEP-2020), which is a commendable step in the academic world. The National Policy on Education encourages higher education institutions to work towards solving problems rather than looking for solutions, which will surely change the landscape of higher education in India and provide students with a better education system. Will work towards making a better person. Swami Vivekananda had also said that make the people educated and develop their all round development, only then the development of society and nation is possible. In the Indian context, the business predictions are indicating, by the year 2032, India can become the third largest economy in the world. This is possible only when there is all round development of our students and employment opportunities are available to them. Unless we make available the developed resources of knowledge to our youth, then we cannot move towards the complete goal and the matter of providing developed resources of knowledge has been taken prominently in the National Education Policy, which is commendable. The new education policy will develop a fundamental change and attitude towards education among the youth. From school education to college and university education, a variety of options will be available to the students, which will help them in employment and enhance their personality. Certainly a new India has started through a new education policy.

The fundamental feature of the new education policy is that it focuses on Indian philosophy and through this we can give shape to the concept of a society which has balanced development. New education policy is also focusing on new technologies, new methods, new patents, new publications, which paves the way for bright future of our students, employable certificate diplomas and vocational courses have also been started. This will definitely enhance the personality of the students as well as enhance their skills and various employment options will be available to them. In this policy, topics like environment, yoga, human values, ethics, women empowerment etc. have also been included, so that a healthy environment can be created in the society.

The approach of the new education policy is to make students research-oriented. Colleges and universities have specially included this approach in the curriculum to develop a research-oriented approach in the student. With the implementation of the new education policy, we can expect a new India, a new society, a new future, in which we can give a new India, a strong India to our youth. In this direction, the National Education Policy will work as a Brahmastra.

The new National Education Policy has been implemented in the state under the leadership of Hon'ble Chief Minister Shri Shivraj Singh Chouhan and Hon'ble Education Minister Shri Mohan Yadav. There are

many options available to the student here. For example suppose you are studying in Bachelor of Arts course. After one year, if the student does not feel like doing a Bachelor of Arts course, then according to the new policy, this one year will not be wasted and you will get one year certificate. Now if you are studying in some other degree and leave that also after two years, then you will get diploma for these two years. The entire undergraduate level course will be completed in 3 years. Two types of options have been provided to the student in the National Policy. Graduation in 3 years and second who want to go into research they have to study 4 years. Now post-graduation will also be of 1 year. The option of online as well as offline facilities will be available to the students. The marks or grades obtained from the online course will be displayed in the mark sheet. One more thing to note here is that the annual exam will be of 2 hours. The assessment will be based on a credit system in line with international standards. A student can pursue more than one subject, a science student can also take arts or commerce. It has also been provided with the option of changing the subject in the first and second year as well as the facility of vocational courses is also available to the students under this. Surely this will enhance the skills of the students and many employment opportunities will be available.



Professor Braj Gopal
Cheif Editor



Professor Akhilesh Shukla
Editor

CONTENTS

01.	Assessment of Physical and Mental Health of Working and Non-working Women: A Comparative Study Nidhi Singh, Anjali Srivastava	09
02	Comorbid Anxiety and Depression Disorders: Prevalence and Impairment among Elderly People A.K. Srivastava	22
03	Psycho-Socio Consequences of Gender Inequality and Its Effect in the Economic Growth and Upliftment of Women In Society Mihir Pratap, Veena	32
04	PurushaThalappoli; A unique ritual practice of Kurinjikkavu Sethu Maria George	39
05	A Social Perspective on Empowering Women in India Akhilesh Shukla	47
06	An Overview of Processed Food Industry in Bihar Challenges and Opportunities Saba Haidri	54
07	A Critique of Implementation of Municipal Solid Waste (MSW) Handling Rules, 2016 for Mumbai Megacity Chandani Bhattacharjee	58
08	A study of Health Profile of Beedi workers in Memari I Block, East Bardhaman, West Bengal Anuradha Guha Thakurata	66
09	The Protection of Children from Sexual Offences Act, 2012 – An Overview Shilpa Seth	75
10	Medicine Advertisement in Colonial Oriya Newspapers Jayanti Sahoo	82
11	A Study of the Consumers' Brand Awareness of Herbal Personal Care Products with reference to City of Mumbai Rita Khatri, Simran Kalyani	90
12	Consumer Behaviour: Current Trends in Processed Food Products in Bihar Saba Haidri	96
13	Socio-Economic Scenario and Political socialization of Children in Shivamogga District Onkarappa A. P.	101
14	Law of Sedition Requires Alteration or Deletion? Vivek Sharma, Monika Maheshwari	112
15	Religious Consciousness in the poetry of Emily Dickinson Sudhir Kumar Tiwari	124

16	Philosophical Perspective in Rabindranath Tagor's Poetry: A Literary Review Jyotshna Mishra Shubha Tiwari	127
17	Online Teaching: A Challenge for Teachers and Students Poonam P. Joshi	130
18	Is There Any Difference between Government College Teachers and Non Government College Teachers in the level of Adjustment? Judasiya Poonam D.	135
19	Effect of Selected Yogic Intervention Strategies on Triglycerides: A Comparative Study Diwakar Pal, Hukum Singh	138
20	An experimental study to assess the effectiveness of lecture cum demonstration on first aid for selected Minor injuries among Asha in selected area of Bhopal, (M.P.) Chhaya	143
21	A comparative study to assess the level of knowledge And practice on infant feeding among working and non Working mothers in selected community areas at Bilaspur (c.g.) Akanksha Wani, Rachna Abraham, Shikha Tirkey	150
22	Why Madhya Pradesh is lagging in Fertility Decline? Jogindar Singh Chauhan, Raj Kumar Monika Batham, Dauli Kumari	156
23	An exploratory study to assess the level of knowledge on biomedical waste management and practice regarding safe disposal of needle among lab technician in a view to develop information booklet on biomedical waste management at selected hospital of Chhattisgarh Neelam Sahu	161
24	The Castes of Superior Cultivators in Awadh Nisha Rathore	168
25	Indian Mining Sector: Issues and Environmental Problems Poonam Chaudhary	173
26	Spatial Disparities in Public Healthcare Facilities in Jammu & Kashmir Raj Kumar, Shazia Parveen, Mohd Tufail	185
27	The Consumer protection law and its challenges for the future in India Arti Shukla	200
28	Impact of Mental Imagery Training on Anxiety and Self Confidence of Female Basketball Players Participate in the Inter University Level Reena Walia	205
29	A Study of Academic Stress among School Students Manoj Kumar Singh	211
30	Practice of Pranayama is A Miracle For Human Life in Today's World Lokendra Pal Singh Chauhan	216

Assessment of Physical and Mental Health of Working and Non-working Women: A Comparative Study

• Nidhi Singh

•• Anjali Srivastava

Abstract- *The objective of the present study was to assess the health status in working and non-working women of Rewa District. It was hypothesized that there would be significant differences between physical, mental health and overall health of working women and non-working women. In addition there would be a significant positive correlation between the physical health and mental health of subjects. The study was conducted on a sample of 100 women of Rewa district out of which 50 working and 50 non-working women who were engaged in different professions and non-working women were simply housewives. The personal data sheet named as Vyaktigath Prasnavali and Cornels Medical Index (C.M.I.) Health Questionnaire developed by Wig, Pershad and Verma (1983) was used in this study to assess the health status which revealed distress score. The results supported the hypothesized predictions related to physical, mental and overall health. The distress mean scores of non-working women were found to be higher than working women. However there were significant differences found between the two groups for physical, mental and total health. The results are discussed at length in the full paper.*

Keywords- *Working and Non-working women, Physical health and mental health*

Women have been an important subject of study. A huge mass of literature on the history of women has already appeared in the western language. There have been a lot of numbers of studies conducted in India as well. In the contemporary India today the subject has received much attention. Women have become modern in their economic and social situation. They have to break with the tradition of an authoritarian past.

Remnants of age old historical and biological traditions regarded women as the intellectually weaker and less able to shoulder responsibilities in politics or labour market. During the present century there has been change in the general population's regarding role stereo of the females. Today the Indian women no doubt are the most important constituents of human society and have always been the focus of attention for all.

Women have been working inside and outside the home for centuries. In the rural India there have been millions of women tolling at home and working outside for the simple satisfaction of family. Marked changes have also been brought about in the urban setting as education and proliferation of opportunities for gainful employment have provided women and economic emancipation. The dynamics of the modern working women,

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encompasses equal opportunities.

Today in this modern era working women's positions in the family as well as among the relatives and the society has become elevated owing to employment. They are not considered now at a non-entity. They are given weightage at home and outside.

The Prime Minister "Mr. Atal Bihari Bajpai" on March 8, 1999 said that women was venerated as Shakti, Saraswati and Lakshmi, it on the women's day celebration. He further added in his speech that it is shameful that the Shakti depends on man, while Sarswati is deprived of education and Lakshami has to bear the brunt of exploration.

According to "Mahtma Gandhi" man's education is an individual education but a woman's education is the education of the family". It is important therefore at any time and in any country what women do, what they think, how much understanding of problems and how much involvement they have with this problems and how much involvement they have with this problems. In an ancient Sanskrit saying it is said that women is the home saying it is said that women is the home and the home is the basis of the society. "YATRA NARIYASYA PUJYNTE BASANTE TATRA DEVTA". This single line in itself describes the status of women in society.

In the eighteenth century with the spread of democracy the liberalisms all over the world's women's role changed towards emancipation in India after independence. In 1947, a legislation was passed which provides equal opportunity for men and women in every sphere of life other legal measures, like the Hindu code bill and law relating to marriage, divorce, adaptation, succession further contributed to their equality with men with better calculation and opportunities, new vistas opened up for women.

Today, we usually find two categories of women- those who have a primary interest in career and those who want both a career and family. A great majority of women from both these categories are aiming for self-betterment in order to accomplish greater achievements.

A need was felt to study on Indian women sample. It was felt that the Indian women toil endlessly fulfilling the demands of each role. Yet their economic contribution has not yet been recognized. About 90% of women involved in works as agriculture tea plantation mining and construction labour, besides handicraft, small shops and maid servants and other fields where illiterate women are engaged as a worker.

Concept of Health-Health has been defined as the state of complete physical mental social and spiritual well-being, not merely the absence of disease or infirmity by World Health Organization. According to George Stone (1987) the definitions of health fall into two categories. One of them portrays health as an ideal state and those that portray health and that the disease or disability with this limited definition of health despite his or her accomplishments, productivity and contribution to society. The second definition avoids this problem by considering health as a direction toward greater health is better than movement in the opposite direction. Health is multidimensional therefore all aspects of living biological psychological and social- must be considered. A scientist who disregards personal safety or

physical health to search for a cure for contagious disease would be moving away biological health but forward social and perhaps psychological health.

A large part of psychology's involvement in health care is a commitment to keeping people healthy, rather than waiting to treat them after they become ill. Psychology shares this role with medicine and other health care discipline; but unlike medicine (which trend to study specific disease), psychology contributes certain broad principles of behaviours that across specific disease and specific issues of health. Among psychology's contributions to health care or technique for changing behaviour that have been implicated in chronic disease. In addition to changing unhealthy behaviours, psychologists have also reduce stress improve compliance with medical advice and help patients and family members.

Mental health and personality adjustment problems have become topics of every day conversation, mental health is peace of mind something we want for ourselves. When we speak of happiness, satisfaction, pleasant feelings, satisfactory adjustment to work and environments, economic stability and good health we are usually talking about mental health.

Mental health has been defined by various psychologists in different ways social psychologist define mental health in terms of social function. The terms normal or healthy can be defined in two ways. First from the stand point of functioning society, one can call a person normal or healthy. If he is able to fulfill the social role, he is to play in that society and if he is able to participate in the growth of society. Second, from the stand point of the individual we look upon health or normality as the optimum growth and happiness of the Individual.

Menninger (1945) has defined mental health as the adjustment of human being to world to each other with a maximum of effectiveness and happiness. He writes "mental health is the state of well-being in which there is a dynamic efficient functioning of the whole man which brings about co-ordination of his powers in such away as to develop achieving his goals both present and remote." Jahoda (1995) has proposed three basic features of mental health. They are as follows:

1. The person displays active adjustment of attempts at mastery of his environment in contrast to lack of adjustment or indiscriminate adjustment through passive acceptance of social conditions.
2. The person displays manifests, unity of personality the maintenance of a stable integration, which remains intact in spite of flexibility of behaviour, which derives from active adjustment.
3. The person perceives the worker of himself correctly, independent of his personal needs.

The mentally healthy person is on efficient happy and contented person. He processes habit patterns, conflict discords and inconsistencies, contrariwise, the mentally ill person is seriously disturbed individual who suffer from many frustrations in his daily life experiences.

Mental health indicated psychological well-being. It is the ability of the person to balance his desires and emotions with effective psycho-social

adjustment. Headfield (1952) reported mental health as the harmonious functioning of the whole personality. Bhatia (1982) regarded mental health as the ability to balance fallings, desire, ambitions and ideals in one's daily living. It means the ability to face and accept the realities of life. Therefore, mental health can be perceived as a complex phenomenon which depends on a set of familial, personal psychological and sociological variables.

The National Association of Mental Health (US) named some characteristic of people with sound mental health. These people are not bowled even by their emotions. They can take life's disappointments in their stride and have an easy going attitude towards themselves and others. Thus we see that mental health is a discipline, self determination, responsibility and will power. Health is never maintained or achieved in an easy way. There are many factors responsible for a sound mental and physical health.

Review of Studies- There have been some very significant contributions to the study of working women. Rani (1976) has cited a number of American and European as well as Indian studies in her book entitled "Role conflict in working women."

Nye and Hoffman (1993) examined the factors involved in the women's decision to work. They have laid great deal of stress on personality factors although the monetary incentive is also considered important. They point out that there are three kinds of facilitators for women's employment viz (1) those which affect the house wife and mother role, (2) specific and general attitude of family and community and (3) opportunities for employment. The decision to work, however, is thought to be greatly influenced by the husband attitude toward work.

Here (1983) examined the question of dominance and working wife. In the working class and in the middle class the working wife exerts more influence in decision making than the non-working wife there is some association between the number of children in family and the influence of the husband in decision making families in which the wife had the greater influence tended to have fewer number of children.

In India, the study on women is their status, either at present or through the ages. There are good historical accounts of status of women in various periods of history based on available records. Ross's study (1981) of Hindu family in an urban setting gives a vivid picture of educated woman and their interpersonal relations in the family. Vidyarthi (1960) has devoted attention to a survey of married women and their attitudes towards parental authority, marriage preference and free mixing, qualities required in a husband, opinion toward divorce and participation in economic activity. A book, first published in 1998 by Kranti Rana entitled "Modern Working Women and The Development Debate" has covered many interesting topics related to work environment equality, opportunity and status, power and justice, attitude and role of socialization and education.

Baruch (1988) felt that they compartment their activities successfully and no doubt their own ability to manage efficiently at home and work. Khanna (1992) examined the life stress among working and non-working women in relation to anxiety and depression. Anxiety was found to

be significantly and negatively related to positive life change in working subject and negative life changes in non-working subjects.

Rastogi and Kshyap (2001) reported that significant negative relationship existed between occupational stress and mental health among married employed in teaching, nursing and clerical jobs. The source of stress for working and non-working women are heavy workload, lack of co-operation from colleagues or neighbours and negative community attitude.

Jogsan (2010) found a significant difference in mental health and social adjustment with respect to both working and non-working women. Singh (1972) conducted a study to know the anxiety of working and non-working women. A 2x2 factorial design (age and working condition) was employed and the finding revealed that both variables have significant influence on anxiety. Bala and Lakshmi (1995) studied the relationship of self-concept with marital adjustment in educated employed and unemployed women and found significant relationship between the two variable.

Bajun and Dagar (2013) designed a study to compare the health condition of working and non-working females of Pakistan and he find out the health problems. It was concluded that majority of house wives included in the study were illiterate and suffering from diseases like high low blood pressure, problem related to stomach, heart and kidney, gynaecological problem etc. They were also not doing their regular medical check-up. Whereas the dietary habits of working ladies were better than house wives. They are doing their medical check-up. Although a small percentage of them were facing health problems. During the interview it was also found that financial dependency, low literacy rate of Pakistan society and especially among the females are the major reasons of the poor female health. Similarly for working females social independency is also one of the reasons of their medical check up and better dietary habits and health.

Panigrahi et.al. (2014) observed that 32.9% of respondents had poor mental health and only about 10% of these women had sought any kind of mental health services. Logistic regressions analysis showed that 3 predictors such as favourable attitude of college, sharing their, own problem with husband, and spending time for yoga/meditation/exercise had significant positive Impact on the mental health status of married working women.

Vernekar and Shah (2019) conducted a comparative study of health related quality of life among working and nonworking married women in an urban area. The results revealed that working women had better quality of life in comparison to non-working women. The lowest means were in energy/ fatigue category.

Dudhatara and Jogson (2012) conducted a study to find out the mean difference between working and non-working women in mental health and depression. Result revealed that significant difference in mental health and depression with respect to both working and nonworking women on mental health and depression.

Mankani and Yenangi (2012) conducted a study to assess the status of mental health of working and non-working women. The results revealed

that there was no significant association between mental health, dimensions of the working and nonworking women. The working women had better mental health when compared to nonworking women. The demographic factors such as age, education, income and number of children had a positive and significant relationship with working women and family size had negative but significant relationship with mental health of the working women.

Kumar (2016) has shown that women's occupational status has been closely associated with the home and family. By taking up employment, they have to play a dual role housewife and career women. There is a clear conflict between the society approved status of women as house wives and mother of children on one hand and their status as more productive workers on the other. Family duties have also imposed restrictions on their role in their employment. As such there is role conflict faced by working women. The conflict and dual role of working women has resulted stress, tension, anxiety, obesity etc. and consequently working women are face frequent ill health, both psychological and physical.

Machchhar (2017) conducted a study to find out the mean difference between working and non-working women to mental health and depression. The result revealed the significant difference in mental health and depression with respect to both working and nonworking women on mental health and depression while the correlation between mental health and dispersion revealed 0.71% high positive correlation.

Suman and Chattarjee (2015) compared the health status on working and non-working women using standard short form. The result revealed that working women significantly scored less on mental health when compared with non-working women.

Jemima (2010) has shown that there was a negative correlation. Hence when the stress level increases, the health status decreases and there is a significant association between stress and selected demographic variables such as education, occupation, number of children, mode of transport and duration of work hours.

Vaghela (2014) conducted a study to know the effect of working and non-working women mental health. The results indicated that working women a lot differ on mental health score as compared to non-working women. Working women have shown better mental health in compared to non-working women. Suri and Singh (2017) found that there is a significant difference between working and non-working women with respect to their mental health and martial adjustment.

Murray, et.al. (2003) explained that there was no significant relationship between age and mental health of unemployment of women. It also observed that education was positively and significantly related to positive self-evaluation, perception and reality and overall mental health at working women while no significant relationship was found with any dimension of mental health of non-working women.

Aim and Hypotheses- The present research intended to explore physical and mental health in working and non-working women and to make

comparison between two groups. The following hypotheses were formulated for the present study.

1. The mean distress score for physical, mental and total would be found to be greater in non-working women in comparison to working women.
2. There would be significant differences found between physical, mental and overall health symptom scores of working women and non-working women.
3. There would be positive correlation found between the physical health and mental health status of the subjects.

Instruments used- The Personal data sheet named as a “Vyaktigath Prasnavali” C.M.I health questionnaire developed by Wig, Pershad and Verma (1983) was used in this study. The high score obtained on the CMI health questionnaire is indicative of distress.

Sample- The study was conducted on a sample of 100 women subjects of Rewa district out of which 50 were working in different professions as doctors, teachers, nurses etc. Non-working women were simply housewives. The age of the subjects ranged from 40 to 50 years. Door to door survey was employed to ascertain the two groups of women. They were matched on age, gender, socio-economic status, marital status and education. The purposive sampling method was used in this study.

Along with personal data sheet C.M.I. health questionnaire was administered on the subjects one by one. Data was collected on working and non-working (N=100) the answer sheets were systematically scored using standard and appropriate scoring method and systematically analyses.

Results and Discussion- The data was subjected to statistical analyses. The means, S.D. scores and significance of difference between mean (t-test) were computed which are presented in tables.

Table 01
Showing the mean scores,
SD and the significance of difference between
physical health scores of working and non-working women.

Subjects	Mean	SD	df	t	r
Working women	22.58	9.25	98	2.68	P<0.01
Non-working women	29.6	15.88	98		

By looking at table it is evident that the mean score of physical health are found to be greater in non working women in comparison to working women.

The critical ratio reported in table 1 depicts that t-ratio for physical health are highly significant for working and non working women (t₉₈=2.68, P<0.01) significant at 0.01 level of significance.

Table 02

Showing the mean scores, SD and the significance of difference between mental health scores of working and non-working women.

Subjects	M	SD	t	df	P
Working women	10.34	4.89	1.82	98	P<0.05
Non-working women	14.18	14.09			

Significant at 0.05 level

By looking at table at table 2 it is evident that distress means scores for mental for non-working women is higher than that for working women. The t-ratio was found to be significant at .05 level. $(t_{98} = 1.82, p < 0.05)$. This score significant, at 0.05 level.

The results show that working women possess good physical health and mental health than non-working women.

Table 03

Showing the Significance of difference between mean overall physical as well as mental health of working and non-working women

Subjects	M	SD	t	P
Working women	34.46	12.41	2.98	P<0.01
Non-working women	43.78	19.01		

By looking table 3 it is evident that the mean overall (distress) scores for non-working women was higher than that for the working women. The t-ratio is found to be $(=2.98, P < 0.01)$. This score was significant at 0.01 level of significance.

The overall health was significantly greater among the non-working women as compared to their counterpart i.e. the working women.

Table 04

Showing the coefficient of correlation between the physical health and mental health of subjects.

Physical and Mental Health	M	ΣXY	r	Interpretation
Working women	26.68	4854.0192	+0.12	Low positive correlation
Non-working women	29.6			

By looking table 4 it is found that low positive correlation between the physical and mental health of the subject was found. It indicates that the physical health is only mildly related to the mental health of the subject. The present study was conducted to evaluate mental health and physical health within working and non-working women.

It was hypothesized that mean distress score for physical, mental and total would be greater in non-working women in comparison to working women. The results showed that non-working women distress mean scores were found to higher than their counterparts. Thus hypothesis (H1) is accepted.

In addition in the present study it was hypothesized that there would be a significant difference found between physical, mental and overall health symptom scores among working and non-working women (H2).

The results showed that the working and non-working also differ in

level of mental health in their lives. It is possible that working women are greater sufferers of work place stressors whereas non-working women suffer more at home.

Mukhopadhyay et.al. (1993) examined the influence of out of home employment on mental and physical health parameters of mothers in Calcutta. The findings indicated that the anxiety level of both the group were similar, although the nonworking subject obtained higher anxiety scores.

Nathawat and Mathur's (1993) findings indicated significantly better marital adjustment and subjective well-being in the case of subject working outside the home as compared to housewives. Subjects working outside the home scored high on general health, life satisfaction and self-esteem measures and low on hopelessness, insecurity and anxiety. Further the result showed that the house wives had lower scores on negative affect as compared to women working outside the home.

Some investigators have reported the physical and mental well-being is found to be high in working women (Nathawat and Mathur 2003 etc) some found no difference (Mukhopadhaya 1993) and others have stated that the mental health of working women is found to be low in comparison to non- working or simply housewives.

It is probable that women with multiple roles are likely to experience a great deal of stress and distress in their lives because of their spouses their children and outside employments women play roles that are different from those of men (wife and mother) but structured differently. Involvement in both work and family roles has been seen as a source of advantage for man over women with respect to mental health. But at the same time they have built in capacities to deal with stress.

Anand and Sharma (2017) did a comparative study on the quality of life of working and nonworking females. The study concluded that non-working females had a better quality of life as compared to working females. The results of the present study refuted this finding.

The results demonstrated that nonworking women mean scores were found to be comparatively higher for physical health, mental health and overall health scores which indicate high symptom score than working women.

Ojha and Rani (2004) observed significant negative correlation between life stress and positive self-evaluation and between life stress and integration of personality among working and non-working women.

Tandvi and Chandracharya (2014) conducted a study of mental health of working and non-working women with regards to area of residence. The result revealed that significant difference does not exist between working and non-working women on mental health. It is also seen that urban women have better mental health as compared to rural women.

Singh (2018) investigated the adjustment and mental health in working and non-working women. The result revealed that there is a significant difference between working and non-working women with respect to their adjustment and mental health.

Studies have observed a direct relationship of stressful life events and psychosomatic disorder Venkoba and Nammalver (1978) in a study of depressive patients could not demonstrate direct relationship of stressful life events and depressor on the other hand Lal, et.al. (1982) observed even higher life events in hypertensive patients besides higher distress. However in the present study stressful life events and depression was not taken into consideration. They may yield more interesting findings.

The women of today are under tremendous pressure even as she enjoys the perks and privilege of being a more liberated individual as compared to women of earlier time. The career women have not a success of her life both as a professional and housewives for example a supportive family it must for the same.

Nathawat and Mathur (1993) investigated subjective well-being and marital adjustment among Indian educated housewives and working women. Findings Indicated significant better marital adjustment and subjective well being in the case of subjects working outside the home. A plausible explanation can be that the working women explosive it works. They meet significant pressure at their workplace and have supportive working environment.

Singh and Bawa (1996) conducted a study on adjustment problems of working and non-working women. It was found that the working women feel better adjustment at homes as compared to non-working.

In the present study it was noted that both for working and non-working women the low positive correlation existed between total health symptom score.

In this context some explanation can be provided. First explanation can be given in terms of conditions of women, working women are found to take more responsibilities at home and in the outer world. They interact more and more in outer social environment, while non-working women reside at home they do not feel any responsibility. The result revealed significant difference in the physical and mental health. The working women reported good mental health. This might because of nurtured and mature relation with grown up children and husband for repairing greater health.

The overall health was significantly greater among the non-working women as compared to their counterpart i.e. the working women perhaps the working women have greater level of social participation, social support, financial independence autonomy, affiliation, opportunities for self-expression etc. than the nonworking women might afford to care themselves better as compared to non-working women. The results of the present study further reiterate that the society must pay greater attention to improve the physical and mental status of non-working women.

The correlation showed that the physical and mental health of the working as well as non-working women were found to be bear a mild a positive correlation. This implies that the physical and mental health related to each other in such a way that increase in any one of them causes increases in the other. Although the coefficient of correlation ($r=0.12$) was low and it

needs further verification but it can be said that the two types of health were found to be related with each other.

Limitation and Suggestions- The present study had certain constraints like several other studies conducted in applied social science. The sample was restricted to working and non-working women of Rewa district ranging 40 to 50 years. This study could have been done on various age level and marital status. The demographic variables were not studied which may have affected the results. The study was confined to middle families nature of work status might have influenced the result indirectly. The result of the study cannot not be generalised for all working women.

Only two psychological variables were studied probably social support and job stress are important variables which can be studied in future research be taken in addition to other these variables in further research.

The present research was based on urban sample. Similar studies should be conducted on rural sample. Such comparisons would show some interesting features especially in Indian context.

Last but not the least efforts should be made to introduce intervention techniques to enhance physical and mental health of women. It is true that no research is final there are always avenues open for research in the same area.

It is suggested that there is no doubt in accepting the fact that there cannot be happiness and full development so long as women remain depressed and exploited. No society can be free and just until women enjoy freedom and justice and opportunities for utilizing their full potentials.

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Comorbid Anxiety and Depression Disorders: Prevalence and Impairment among Elderly People

•A.K. Srivastava

Abstract- Globally, anxiety and depressive disorders are amongst the most common and often comorbid mental disorders prevailing across age groups, gender and socio-economic status of people. The comorbid conditions of above Common Mental Disorders (CMDs) are more complex, having greater adverse effects and difficult to treat than any one of them. The prevalence of comorbid anxiety and depressive disorder and impairment due to them among the elderly population has remained less explored. The present research paper examines this empirically. The Hindi version of PHQ-9 and GAD-7 questionnaires was combined to make a composite structured interview schedule to screen the subjects under different severity categories of the CMDs. The prevalence and impairment rates for various co morbidities were analyzed in terms of proportions (%) of subjects suffering from and perceiving the disability/impairment. The patterns of comorbid anxiety and depressive disorders revealed that maximum proportion of the elderly subjects (27.25%) suffered from high comorbidity severe/moderate CMDs overlapped with severe/moderate symptoms of each other, followed by low comorbidity severe/moderate of anxiety or depression disorders overlapped by the 'mild' symptoms of each other (16.32%) and the lowest proportion of subjects suffered from 'Mixed Anxiety and Depressive Disorder – MADD having medium comorbidity. From amongst the subjects reporting high or very high level of perceived disability/impairment, about two-third (67.20%) were from High; 16.32% from Low and 11.63% from medium comorbidity conditions of the two CMDs. The findings were consistent with previous researches showing maximum disability among the subjects having high comorbidity of anxiety and depressive disorders.

Keywords- Comorbid, Anxiety, Depression, Impairment.

Like co-existing physical diseases (e.g. diabetes and hypertension; hypertension and heart disease etc.), the comorbidity of psychiatric (mental) disorders is also very common. It is widely acknowledged the adverse mental health outcomes are higher and the course and treatment are more complex for comorbid diseases than any one of them taken singly.

According to the World Health Organization (WHO), Depression and Anxiety Disorders are among the most common mental disorders across different age groups, genders, regions, classes etc. throughout World (WHO,

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2017). They are also among the most common comorbid mental disorders, globally. Depressive and anxiety symptoms are found coexisting with each other in majority of cases both in clinical as well as community settings (Batelaan et al. 2007; 2012). The comorbid sub-threshold (mild) anxiety and sub-threshold (mild) depression has been recently identified as the 'Mixed Anxiety – Depressive Disorder - (MADD)'. The MADD has been added as a new diagnostic category (F - 43.23) in the WHO recognized International Classification of Diseases – 10th Version (ICD-10). It has also been included in the Appendix for research purposes in the Diagnostic and Statistical Manual of Mental Disorders – IV Version (DSM-IV) by the American Psychiatric Association (APA). However, the inclusion of 'Mixed Anxiety-Depressive Disorder – (MADD)' as a separate diagnostic category in the above international classification systems still remains highly debated (Cameron, 2007; Batelaan et al. 2012; Eysenck & Fajkowska, 2018; Möller et al. 2016; Suradom et al. 2020; Salcedo; 2008; Wu & Fang, 2014).

Overlapping symptoms of depression and anxiety disorders have been found in as high as 87% of the cases. Functional disability/impairment has been found substantially greater in those who suffered the comorbid depression and anxiety disorders as compared to those who suffered any one of them singly (Power et al. 2017; Salcedo; 2018; Wu & Fang, 2014). About 20% of work loss days have been reported among those suffering with comorbid sub-threshold depression and sub-threshold anxiety i.e. Mixed Depressive – Anxiety Disorder (MADD) (Das-Munshi et al. 2008). High treatment seeking among such people indicated presence of prominent distress. The associated significant impairment and distress with such comorbid depressive – anxiety conditions (or MADD) have warranted for its inclusion as a new diagnostic category in ICD-10. However, the critics argue that diagnostic criteria for such a diagnosis are still tentative and need further research (Batelaan et al. 2012).

Limited number of epidemiological studies have reported the prevalence rates of comorbid depressive and anxiety disorders among the elderly people both in clinical practices as well as in general population. Despite the widely known fact that depressive and anxiety symptoms are often found overlapping with each other, this remains relatively less explored phenomenon in geriatric psychiatry (Byers et al. 2010; Cairney et al. 2008).

Empirical data from both primary health care as well as community have emphasized on a dimensional approach to the classification of depressive and anxiety disorders. Researchers have suggested that depression and anxiety may be better characterized on a dimension (Goldberg, 1996; Preisig et al. 2001). The concurrent presence of a depressive disorder with prominent anxiety symptoms is highly common both in clinical and community settings. For example, more than 70% of the people suffering from depressive disorder also had anxiety symptoms of which 40-70% met criteria for the diagnosis of some anxiety disorder (Wu & Fang, 2014).

Globally about 15% of the elderly among general population and about 25% from among in-patients elderly have been found suffering from depression. It was the most common cause behind their low quality of life

(QOL), poor physical and mental health and impaired cognitive and social functioning. Suicide among the old adults is more commonly associated with it as compared to the other age groups (Power et al., 2017). The sub-syndromal depression (that does not meet the diagnostic criteria for major depression) – has been found highly prevalent among the elderly people. It has also been found enhancing with their increasing age from 10 to 25% among community dwelling elderly and upto 50% or above among the elderly in-patients in clinical settings (Kane et al. 2013). The high rates of the above sub-syndromal depression has been associated with greater morbidity, disability, mortality and impaired physical and mental functionality among the older adults than people of other age groups (Kane et al. 2013).

High prevalence rate of depression has been found among Indian elderly (Grover & Malhotra, 2015). The Longitudinal Ageing Study of India (LASI) 2017-18 report revealed that about 20% of Indian elderly people suffer from 'severe' depression. Rural, uneducated and poor people suffered greater than their counterparts. Females suffered more than males. Majority of them (about 51% or above) have reported experiencing 'some or the other form' of disability or impairment due to the depression (Chitravanshi, 2021). Some other researchers have stated that prevalence of depression among Indian elderly may be 10 times greater than reported by most of the 'self-reported' surveys or the diagnosed depression (Seth & Mishra, 2021).

The comorbidity between depression and anxiety disorder in community dwelling elderly people remained less explored, despite the fact that these Common Mental Disorders (CMDs) are known to co-occur in younger adults and that this co-occurrence has been associated with greater clinical severity (Cairney et al. 2008; Salcedo, 2018). Findings from geriatric tertiary out-patient settings have shown that depression severity and duration along with neuroticism may lead to the comorbid anxiety disorders (Suradom et al. 2019). In both clinical and epidemiological researches, anxiety and depression have shown the symptoms overlap consistently (Möller 2016). In long run the diagnostic conversion between them is not unlikely to occur. Hence, it has been suggested to regard them as the extremes of one continuum.

The present research was a part of community survey to examine the prevalence of depression and anxiety disorders and their adverse effects among the elderly people of Vindhya region of Madhya Pradesh (India). In this paper the comorbidity of anxiety and depression symptoms/disorders has been investigated along with its potential adverse effects on the elderly population in the society.

Sample-After excluding the 49 subjects from the total sample of 900 subjects, in all 851 elderly people (mean age 67.38 yrs) including 413 women (mean age 67.13 yrs) and 438 men (mean age 67.63 yrs) both from rural and urban areas of Rewa and Satna districts of Madhya Pradesh. Their selection was done through the multi-stage-stratified-incidental sampling technique, taking into account their age, gender, place of residence (rural Vs Urban), education, caste category (SC/ST, OBC and General) and social class (Lower, Middle or Upper). In the present research paper all the above

subjects were taken as a single group of the elderly people to investigate the prevalence of comorbidity of the anxiety and depression disorders and the consequent disability or impairment found among the subjects.

Tools- Patient Health Questionnaire-9 items (PHQ-9) was used to assess and screen the subjects for depressive symptoms and severity of the disorder. Whereas, Generalized Anxiety Disorder-7 items-(GAD-7) – (Questionnaire) was used to assess and screen the subjects for the Generalized Anxiety Symptoms and their severity. Both of these screening tools are highly reliable and valid. These tools have been recommended by the American Psychiatric Association (APA) for the above screenings both in clinical as well as community settings. In Present study a composite interview schedule was prepared with the Hindi Versions of the GAD-7 and PHQ-9. Thus, a 16 items interview schedule was used (7 items of GAD-7 and 9 items of PHQ-9) along with the last common item of both the tools regarding the measurement of the perceived degree of disability/impairment due to the presence of the symptoms of above CMDs. Increasing scores indicated greater severity of symptoms in both the screening tools and the severity categories were as: None (0-4); Mild (5-9); Moderate (10-14) and Severe (15 and above). In both the screening tools the cutoff point was 10 weighted score, which indicated above the threshold symptoms of the CMDs.

Method- The elderly subjects were screened for the prevalence of depression and anxiety disorders through the structured interview. They were interviewed individually at their places after their informed consents. The structured interview schedule consisted of 16 questions (first seven from GAD-7 related to the anxiety and last nine from PHQ-9 related to the depression disorders). At the end of the schedule the common question item given at the end of both the above tools was used for the assessment scale of perceived/degree of impairment due to the above symptoms, if any.

Results and Discussion- Responses of the subjects on the screening tools were assigned scores of 0, 1, 2 and 3 to the response categories of "Not at all", "Several days", "More than half the days", and "Nearly every day" respectively. PHQ-9 total score for 9 items ranges from 0 to 27. The PHQ-9 tool had cutoff points of scores of 5, 10, 15 and 20 for 'mild', moderate, moderately severe and severe depression respectively. The scoring pattern for GAD-7 tool was identical to the PHQ-9 and scores 5, 10 and 15 represented cutoff points for mild, moderate and severe anxiety respectively. For the purposes of present research paper the 'Moderately Severe', 'Severe' categories were clubbed together to set the cutoff points for both the screening tools identical at the scores of 5, 10 and 15 for 'Mild', 'Moderate' and 'Severe' levels of severity for the symptoms of both the mental disorders. The Comorbidity between the anxiety and depression disorders was examined into following five operationally defined categories.

1. **None or No Comorbidity-** No notable symptoms of both the disorders. The subjects showed neither depression nor anxiety.
2. **Minimal Comorbidity-** The subjects showed above threshold (Score 10) i.e. moderate to severe symptoms of either anxiety or depression with minimal overlapping of each other.

3. **Low Comorbidity-** The subjects showed moderate to severe symptoms of anxiety or depression with over-lapping sub-threshold (mild) symptoms of each other.
4. **Medium Comorbidity-** The subjects showed sub-threshold (mild) anxiety symptoms overlapped with sub-threshold (mild) symptoms of depression more or less with similar intensity and duration. It is referred as 'Mixed Anxiety Depression, Disorderer – (MADD)' of Mild Severity.
5. **High Comorbidity-** Occurrence of comorbid moderate to severe symptoms of both anxiety and depression overlapping with each other in similar intensity and duration. For present research paper they were referred as 'Mixed Anxiety and Depression Disorders' – of moderate or severe intensity.

Table 1 and Figure 1 present the Mean (M), Standard Deviation (SD) and Coefficient of Correlation (Pearson's r) of the PHQ-9 and GAD-7 weighted scores. The data have shown that the average values of the weighted scores for PHQ-9 ($M=8.02$; $SD=5.07$) was more or less equal to that for GAD-7 ($M=7.38$; $SD=5.74$). There was a significantly high positive correlation ($r=0.70$; $p<0.01$) between the corresponding PHQ-9 and GAD-7 scores obtained by the subjects. This revealed that the prevalence and severity of the symptoms of both anxiety and depression disorders were highly overlapping. If one subject scored high on PHQ-9, he/she was likely to score high on GAD-7 too and Vice-versa. The highly overlapping symptoms of anxiety and depression disorders, as found among the elderly subjects of the present study, were consistent with many previous research outcomes. The data was further analyzed to examine the prevalence of the comorbid anxiety and depression disorders with respect to the above five operationally defined levels of comorbidity of the symptoms.

Table 2 and Figure 2 show the prevalence (%) rates of the various comorbid forms of the anxiety and depression disorders. It also shows the rate of disability/impairment in terms of proportions (%) of the subject reporting high or extremely high level of impairment of functionality. **None Comorbidity-**About 26% of the total subjects showed no symptoms of either mental disorder. They also were found in negligible proportion (0.80%) amongst those who had experienced substantial impairment in functionality due to the above mental disorders.

Minimal Comorbidity: In all 14.92% subjects suffered from 'pure' depression (Mild 11.63%; Moderate 2.82%; and Sever 0.47%), while 3.64% subjects suffered from 'pure' anxiety (Mild 2.59; Moderate 0.70%; and Severe 0.35%). Thus the larger proportions of the subjects under the minimal comorbidity category suffered either from mild only depression (11.63%) or from mild only anxiety (2.59%) disorder. From amongst the total subjects reporting substantial impairment due to the above CMDs. about 8.0% subjects belonged to this category.

Low Comorbidity: Subjects experiencing depression or anxiety in severe or moderate intensity overlapped with each other's symptoms of mild (sub-threshold) severity, were placed in low comorbidity category. When severe or

moderate symptoms of depression were overlapped with mild anxiety symptoms, it was called as 'anxious depression', under the 'depressed anxiety' the pattern of overlapping symptoms was reversed i.e. 'Severe or Moderate anxiety symptoms overlapped with mild depression. In all, 8.69% subjects (severe 1.41% & moderate 7.28%) were found in the former subcategory, while total 7.63% (Severe 1.99% & Moderate 5.64%) were found in the latter subcategory of the low comorbidity. Thus, more or less equal proportions (8.69% & 7.63%) of subjects suffered from low/mild comorbid/overlapping anxiety and depression disorder in the form of 'anxious depression' and 'depressed anxiety' respectively. Overall, 20% of the subjects reporting substantial impairment in functionality came from this category.

Medium Comorbidity: 'Mixed Anxiety – Depression Disorder – MADD' has been defined as the presence of anxiety and depression symptom both in sub-threshold (mild) intensity with almost equal severity and duration, and which are the cause of substantial impairment in functionality. In this research paper this comorbid condition was referred as 'medium comorbidity'. In all, 11.63% subjects were found suffering from MADD and from amongst those who felt substantial disability/impairment, 4% the subjects came from this group. These findings were in support to the identification of the above comorbid anxiety and depression disorder as the 'Mixed Anxiety – Depression Disorder – MADD'.

High comorbidity– The highest degrees of overlapping/comorbid symptoms of the above CMDs were seen in it. Severe/moderate symptoms of the above two common mental disorders overlapped with each other. For the purposes of present research these were again divided into two subcategories of severe/moderate 'Mixed Anxiety – Depression Disorder – (MADD)' and Mixed Depression – Anxiety Disorder – (MDAD). Maximum proportion (27.25%) of the subjects belonged to this 'high comorbidity' category: 11.40% subjects suffering from severe (5.64%) and 5.40 from moderate MDAD, while 16.21% suffered from severe (6.58) and moderate (9.63%) MADD. These results have clearly shown that the anxiety and depression disorders were highly comorbid in higher intensity of their symptoms as compared to the mild intensities. Further, the rate of impairment/disability in functionality was also highest under this category. About two-third (67.2%) of the subject reporting substantial disability or impairment due to the above comorbid mental disorders came from this category (For details, see Table 3).

The comorbidity of anxiety and depression is quite common (Cameron. 2007; Möller et al. 2016; Suradom et al. 2019; Wu & Fang, 2014; Salcedo, 2018; Suradom et al. 2020). The anxiety disorders are highly prevalent among the elderly people and the comorbid anxiety disorder occurring with the depression disorders have been reported to enhance their disease burden as shown through poor quality of life, physical and cognitive disability and enhanced healthcare use and mortality among the elderly people (Suradom et al. 2020). The common risk factors of comorbid anxiety with depressive disorders have been found as: history of depressive disorder and comorbid anxiety and depression, female gender, prolonged severe level of

depression, and personality trait of neuroticism (Eysenck & Fajkowska, 2018).

The findings of the present study have been consistent with the above research outcomes (Malyszezak & Palowski, 2006; Li et al, 2021). The comorbidity of anxiety and depression was found quite common among the elderly subjects. The prevalence rates and level of impairment associated with the comorbid anxiety and depression disorder increased as the degree/level of comorbidity increased from none through minimal, low, medium to the high levels. The above research outcomes have significant implications for both general physicians as well as mental health professionals. These results have confirmed that among elder people the comorbid anxiety and depression disorders are not only highly common but also highly disabling and impairing and causing substantial physical and/or mental disabling. More intensive research is warranted in this field to examine the course and prognosis of different forms of 'Mixed Anxiety Depressive Disorders – MADD' and 'Mixed Depressive Anxiety Disorder – MDAD'. The present research outcomes are in favour of such diagnosis as a distinct diagnostic category.

Table 01
Showing the Mean (M), Standard-Deviation (SD)
and Coefficient of Correlation (Pearson's r) between the
weighted screening scores of the subject on PHQ-9 and GAD-7.

Screening Tool	N	Σ	Sums of Squares	Mean (M)	Standard Deviation (SD)	Coefficient of Correlation (r)	p
PHQ-9 (Series-1)	851	6828	78404	8.02	5.27	0.70	<0.01*
GAD-7 (Series-2)	851	6279	74225	7.38	5.74		

*High positive correlation significant at 0.01 level.

Figure 01

Showing significantly high coefficient of correlation ($r=0.70$; $p<0.01$) showing high overlapping between the corresponding PHQ- 9 (Depression)- i.e. Series 1 and GAD- 7 (Anxiety) i.e. Series2 weighted scores obtained by the subjects(Ss). Subjects

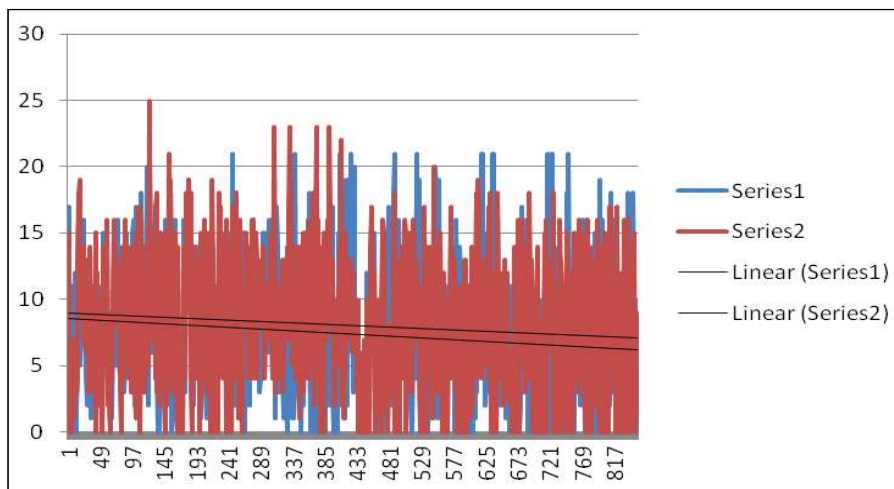


Table 02
Showing prevalence of comorbid
anxiety and depressive disorders under various
degrees of comorbidity of the symptoms of the two CMDs.

Comorbidity Categories	Description of the overlapping symptoms of anxiety and depression	Prevalence (%)	Proportion of Ss reporting Impairment %
None	No notable symptoms of either disorders	26.20	0.80
Minimal	Only depression or only anxiety symptoms with negligible (Minimal) overlapping symptoms of each other	18.56	8.00
Low	Severe or Moderate depression or anxiety with overlapping 'mild' symptoms of each other.	16.32	20.00
Medium	Mild (Sub -threshold) Depression with Mild (Sub -	11.63	4.00
High	Severe and moderate depression and anxiety symptoms overlapped with each other i.e. severe/moderate MADD or MADA	27.25	67.20

Figure 02
 Showing the prevalences of the comorbid anxiety and depression disorders under different comorbidity categories among the subjects

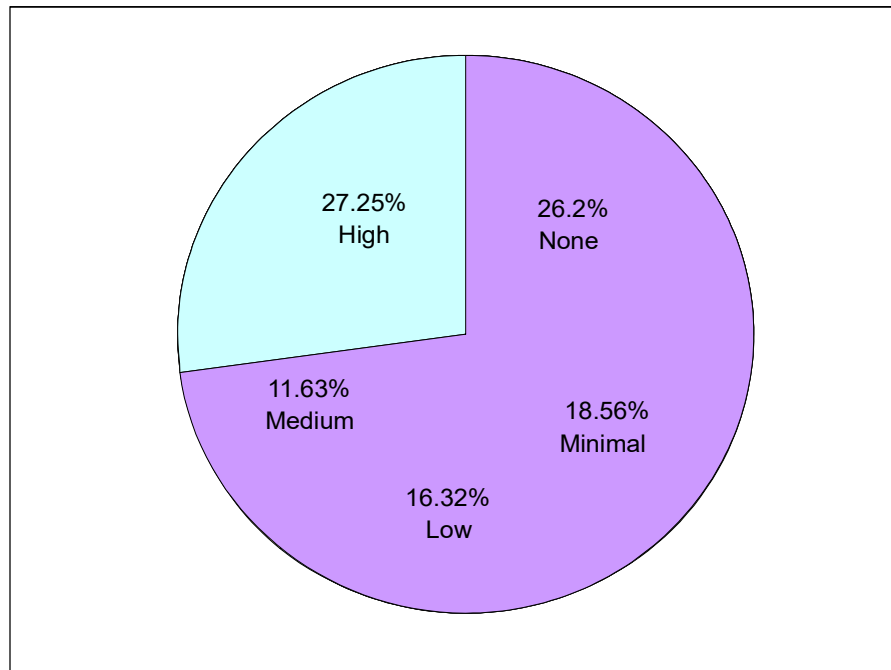


Table 03

Showing various levels and forms of comorbid anxiety and depressive disorder conditions and their severity with their corresponding prevalence rates (in %) and functional disability rates (in%) as found in the elderly subjects.

Degrees/ Levels of Comorbidity	Forms of Comorbid Anxiety and Depressive Disorders/Symptoms with severity level	Frequency (f)	Percentage (%) Prevalence Rate in	Percentage of Subjects reporting High to Very High Disability
1.None Comorbidity	No notable symptoms of either anxiety or depression (Normal subjects)	223	26.20	0.80%
2.Minimal Comorbidity	Severe Depression with Minimal Anxiety (Only Depressive Disorder)- Severe	4	0.47	0.80
	Moderate Depression with Minimal Anxiety (Only Depressive Disorder) - Moderate	24	2.82	1.60
	Mild Depression with Minimal Anxiety (Only Depressive Disorder) - Mild	99	11.63	3.20
	Severe Anxiety with Minimal Depression (Only Anxiety Disorder) – Severe	3	0.35	1.60
	Moderate Anxiety with Minimal Depression (Only Anxiety Disorder) – Moderate	6	0.70	0.80
	Mild Anxiety with Minimal Depression (Only Anxiety Disorder) – Mild	22	2.59	0.00
3.Low (Mild) Comorbidity	Severe Depression with Mild Anxiety (Anxious Depression) – Severe	12	1.41	3.20
	Moderate Depression with Mild Anxiety (Anxious Depression) – Moderate	62	7.28	4.00
	Severe Anxiety with Mild Depression (Depressed Anxiety) - Severe	17	1.99	6.40
	Moderate Anxiety with Mild Depression (Depressed Anxiety) – Moderate	48	5.64	6.40
4.Medium (moderate)	Mild Depression with Mild Anxiety (Mixed Anxiety – Depressive Disorder) – MADD	99	11.63	4.00
	Severe Depression with Severe Anxiety: Mixed Anxiety – Depressive Disorder (MADD)	48	5.64	21.60
5.High (Severe) Comorbidity	Severe Depression with Moderate Anxiety: Mixed Anxiety Depressive Disorder (MADD)	56	6.58	21.60
	Severe Anxiety with Moderate Depression: Mixed Anxiety Depressive Disorder (MADD)	46	5.40	12.80
	Moderate Anxiety with Moderate Depression : Mixed Anxiety – Depressive Disorder (MADD) Moderate	82	9.63	11.20
	Total N =	851	99.96	100

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***Psycho-Socio Consequences of Gender
Inequality and Its Effect in the Economic
Growth and Upliftment of Women In Society***

•Mihir Pratap
••Veena

Abstract- *The psycho-socio consequences of Gender inequality have its effect on social as well as economic growth of women in society. In comparison to man the gender factor plays an important role in economy and upliftment of women in India. In India, the status as well as educational level of women was very much low. The ancient Indian ideal of the equality of male and female was finished and women were considered to be slaves of men. About the century back, the status of women in India was almost the same as it was in the medieval age. Though, it cannot be said that the exploitation of women in India has no parallel in any other country, it can be safely asserted that the women had to face cruelty and exploitation in modern India, even now, the birth of a daughter is not an occasion of happiness for many Hindu Families. Ordinarily, the celebration of the birth of a son is definitely more joyful. Daughters are not given equal rights with the son in the matters of food, clothing, education, etc. They are often married even without their consent. In other words, we can say that still in this present scenario, gender inequality plays a significant role in the upliftment of girl child and women in the matter of economy as well as finance. The economic growth of girl child and women in the society depends on the positive attitude of family members and other people of the society with a sense of promoting women in all fronts.*

Keywords- *women, economic growth, society*

Introduction- Much of the feminist debate of the international level concerns the issue of human rights. In so far as human rights promote the fair and equal treatment of individuals regardless of gender, class, race, ethnicity and religious orientation, feminism and human rights seem to be natural allies. Many feminists argue for the importance of fully including women in the scope and application of human rights. Clearly, women should be offered the basic protections and freedoms that men enjoy. Moreover, feminists argue that simply extending, human rights to women does not go far enough because there are a number of gender specific circumstances such as reproductive issues and domestic violence that remain outside the scope of human rights as currently conceived. This approach to securing women's equality globally focuses on women's inclusion in the scope of human rights and question the gender neutrality of the concept of human rights.

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In contrast to this feminist view, which we shall call the liberal feminist view, some feminists criticize the notion of universal human rights itself. They argue that rights are a culture bound construct that does not do justice to more relational understanding of self or to communal cultures. Feminists, who hold this view claim that the idea of rights is not only male biased but culturally biased and so cannot simply be uncritically adopted by feminists.

The liberal and the multicultural feminist views inadvertently neglect economic issues and so long as this is the case universal human rights have only limited benefit for poor women. Although, no nation is immune from the deleterious effects of poverty the unequal distribution of wealth and power among nations makes the issues of poverty particularly acute in less wealthy less industrialized countries so called "developing nations." Feminists concerned with global women's issues and rights should prioritize economic and social rights, rather than political and legal rights. If someone's basic needs for food, shelter and health care are not met, they may not have the time or energy to concern themselves with gender equality under the law or in the Political sphere.

Although, Economic Justice is foundational for other types of social justice, it alone cannot provide equality for women in the face of persistent gender stereotypes and women's devaluation. But economic power is linked to social power. Two organizations that were surveyed, that is marketplace India and SEWA (the self-employed women's association), illustrate the connection between women's economic empowerment and the resulting overall improvement of quality of life. Both are co-operatives that employ women as well as providing services and programs that promote women's leadership and empowerment.

Economic Role of Women- The position of women in the social structure affects the way they are regarded in their economic roles as well, it has resulted in division of labour, which reinforces the notion of the male having more power and relegates low status occupations to women. In doing so it leads to a waste of female potential and ignores individual differences in capacities and abilities within each member and individual. Once occupational or task segregation takes place, it tends to be retained against all other rational criteria.

In pre-independence and post-independence India, women as solely responsible for family care, their inclusion into the labour market, made inevitable by inadequate incomes of males or absence of male earners, is at certain levels seen as deviant behaviour. It results in the pervasive notion of the women workers as a supplementary irrespective of the total resources contributed to the household or the time and energy spent. Thus, a woman, who earns as 50% or sometimes 100% of the household income is still regarded as a supplementary earner and almost in all cases and in all levels (except to a large extent in the organized sector which accounts for a very small percentage of women) they do not get equal wages for the equal work, nor do the conditions of work offered to them take into account their dual roles. The need to combine productive work with her reproductive role and

family responsibilities means that a women's choice of work is often decided by what is feasible and easily available. Need for this flexibility is frequently exploited by the labour market and is easily used as another excuse to pay low wages to women.

Women, in addition, have virtually no control over the family assets. In the majority of cases land is in the name of the male head of the household. The women also have no control over, or access to, other means of production necessary for agricultural operations like tube wells, ploughs and tractors, which are in men's possessions. The same is true to other agricultural implements and tools, like harrows, sewers, carts, insect sprayers etc. The only tools and implements in the possession of women are utensils, baskets and winnowing fans. However, their work is not wanted and hence remains invisible. In fact, women workers, themselves remain unwanted, under wanted and invisible.

Rights and Equality for Women: The Liberal Feminist View- The Universal Declaration of Human Rights, in its very first article, proclaims that all individuals deserve the right to equality. But it stops short of detailing how this equality could be achieved, either within a nation or among nations. Complicating matters further is the variety of inequalities, including but not limited to: economic, social, racial, ethnic and gender although contemporary feminist theory recognizes the interconnections among these various inequalities. Consequently, many feminist agendas focus on securing equal rights for women under the law. International documents, such as Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, help to provide the moral grounding to make political claims that promote equality with nation-states. The notion of the universal human rights is based on the assumption of the equal worth and dignity of each human being. Right discourse is the powerful tool for making governments accountable for the treatment of their citizens, often preventing or inhibiting violations of human rights such as false imprisonment, forced labour, torture, the lack of due process under the law, and restriction of civil liberties. Understandably, feminists have adopted this powerful discourse to help secure women's rights. In many cases, such as the previous examples, securing women's rights simply means ensuring that women are included in group to whom the right of due processes extended. However, all too often women are systematically disadvantaged in the law, when it comes to owning property. Inheritance, marriage and divorce, reproductive issues and equal access and opportunity to jobs and education. Because of this, many feminists advocate the view that "women's rights are human rights."

Feminist Challenges to Rights Asuniversal: The Multicultral Feminist Views View- Extending rights to women and correcting gender bias in the scope and application of rights are important strategies to promote women's equality globally. Yet, this strategy leaves the notion of rights, more specifically universal human rights, unquestioned. As many feminists have pointed put the use of rights discourse privileges certain notions of the person. Rights are possessed and executed by the individual. Moreover, the notion of rights asks us to abstract from all the particularities of a person,

such as her culture, religion, social class, ethnicity, race and nationality. This very conception of rights as inheriting in individuals already precludes other conceptions of identity, where one might identify more strongly as a member of a cultural, religious or ethnic group than as an individual.

Given this origin, these concepts may carry western liberal bias, such as the idea that culture, religion and tradition can easily be left aside in favour of (abstract) individualism. This devaluation of culture reinforces the dominance of the hegemonic western view understanding issues in their historical and culture feminists uniformly condemn cases of gender-specific violence such as dowry, mentioned earlier. But looking at it as solely a cultural issue, rather than as an economic one, distorts and sensationalizes it.

All too often, liberal feminists, who focus on rights and multicultural feminists who emphasize culture seem to come to an impasse. But some feminists have made beyond the juxtaposition of rights and culture, they question the concept of culture itself. Both caution against a reified and monolithic view of culture, urging us to recognize the variety of heterogeneous and often contradictory practices that make up a single culture, cultures are heterogeneous and complex. And the feminists showed employ a nuanced understanding of cultural difference with respect to gender equality. The struggle over which showed predominate rights if culture overlooks the primary issue on which women's equality hinges: economics.

Feminism and Economic Empowerment- The United Nations Declaration of Human Rights includes social and economic rights, along with political and legal rights. But feminists, like many others in the international arena, have rarely argued for the interconnections of the fundamental rights. In his book, *Pathologies of Power* anthropologist and physician Paul Farmer discusses the situation of the poor, those who lack basic resources such as enough food, safe drinking water a place to live and access to health care. Referring to the deprivation suffered by the poor, he uses the term "structural" violence. Structural violence includes extreme and relative poverty, as well as social inequalities such as racism and gender inequality. Civil Rights cannot really be defended if social and economic rights are not, contemporary feminists must right that the economic status of women is bound up not only with their quality of life, but also with their ability to exercise political and legal rights. Interlocking Problems of illiteracy, inequitable cases and poor health, bolstered by patriarchal systems and social customs make it difficult for women to break free from a life of poverty. Yet, according to a recent population and development report from the United Nations, removing the status, education and health of women is an essential human rights goal and also holds the key to social development in all Societies, improving lives and strengthening families and communities. It is by now a commonplace in development literature that improving women's quality of life enhances the quality of life generally, Poverty and lack of resources obviously affect men and boys as well as women and girls, but societal and cultural gender bias means that poverty disproportionately affects girls and women. Promoting the status of women and girls is an uphill

struggle, no matter where one lives, but when resources are scarce, the devaluation of women and girls can result in real harm. There are myriad examples of gender inequality and poverty both in the developing and the developed countries. India is the second most populated country in the world, and the largest democracy, but still a country in which there is widespread poverty. According to recent statistics gathered by the United Nations Development programme in India an estimated 39% of adults are illiterate, 47% of all children are underweight and undernourished and 67% don't have access to proper sanitation. Scarce resources, combined with the lack of economic and earning power of women and girls, means that gender discrimination is perpetuated for both economic and cultural reasons.

Limited Implementation- Laws and Policies, even if recognizing women's equal rights to land and property, are still very difficult to implement. Regulations and guide lines for implementation of Laws and Policies are often very technical and, in many cases, have not yet been written from a gender perspective. As a result, Laws and Policies, even if recognizing women's equal rights to land and property, are still very difficult to implement. Regulations and guide lines for implementation of Laws and Policies are often very technical and, in many cases, have not yet been written from a gender perspective. As a result, forms for registration of land for example, often simply lack the space to indicate joint registration of both spouses. And the land officials having to work with these forms often lack any gender awareness. Persistent cultural and customary attitudes also work against implementation of women's rights.

Towards Real Rights- The UN-HABITAT led global campaign for Secure Tenure emphasizes that "securing tenure for the household does not necessarily secure tenure for women and children. In understanding the global campaign for secure tenure, the extension of secure tenure must benefit women and men equally.

So far women's land and property rights have remained mainly illusory rather than substantive and the majority of women have therefore not been able to enjoy their rights. The Habitat Agenda, Millennium Development Goals, various Resolutions of the UN Commission on Human Rights and of the UN-HABITAT Governing Council, provide the mandate to UN-HABITAT to be on the Forefront efforts to improve women's land, housing and Property rights, including their equal secure tenure. On the basis of ongoing research, UN-HABITAT, together with various governments, and partner organizations of land and property rights. Some of the activities currently undertaken are:

Advocacy for Further Participatory law and Policy reform with a holistic approach (linking laws and Policies related to rural and urban land, housing, credit, material, property, inheritance and gender), Ongoing research is identifying particular needs for Law and Policy reform in specific countries and the Global Compact for Secure Tenure and urban Good Governance can use those research findings as advocacy entry points, while linking up with various lobbying and advocacy alliances already working towards law and Policy reform.

Conclusions- Women's equal rights to land, housing and property are human rights, recognized in various international human rights instruments. Various positive developments have taken place in terms of Law and Policy reform in many countries, while other countries have not yet taken such steps. In general, more holistic and inclusive approach is still needed in the reform of laws and policies that links laws related to inheritance and the division of marital property to laws and policies on land, housing, credit and gender. Urban land issues should also be brought within the national land policy and linked to rural land issues. Gender should be a true cross cutting perspective, also included in budgeting. Implementation of such laws and policies remains a huge challenge and require concerted efforts from all levels in order for women's rights to land and property to become reality. In other words, we can conclude that if gender inequality becomes less day by day, then the economic growth of women and upliftment will be done, successfully in the society and there will be overall development of girl child and women.

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PurushaThalappoli; A unique ritual practice of Kurinjikkavu

• Sethu Maria George

Abstract- Sacred groves, 'Kavukal' in Malayalam vernacular language are the remnants of forest lands where various types of megalithic rituals practiced by the pre Dravidian people of Kerala. Many of the rituals such as ancestral worship in Kavukal are the continuation of the variety of deep rooted Iron Age practices. Even though the ownership and trusteeship of such lands have transformed from tribal communities to various other superior communities, the new custodians were also well aware of the sanctity of the place and maintained it with utmost care. It is a common belief that any act of curtailing the purity of the Kavvu would invite the anger of the God and that would destroy not only the person but also the entire family itself. Most of the deities in kavu are fierce in nature. Kurinjikkavu is a sacred grove of four acres of rich vegetation with rare species of flora and fauna, located in the small village known as Kurinji Gramamin Kottayam district of Kerala. Kurinjikkavu and surrounding areas are ASI identified megalithic sites also. Fragments of twelve Muniyaras and Palutharas (the local names of Dolmen and Dolmenoid Cists) have been explored from here. This Kavvu is the birth place of a unique ritual which is more than four hundred years old, called 'Purusha Thalappoli', where menfolk carries the Thalappoli and demonstrate procession instead of women. Devotees believe in a Legend behind this practice which associated with Bhadrakali, the fierce form of Goddess Parvati and Lord Mahadeava.

This paper is an attempt to understand a ritual as well as its connection with the ancestral worship, the Megalithic practice of Mala Arayar tribe. Even though the mode and nature of those practices have changed a lot over period of time, with the inclusion with other communities, the basic concept behind those practices are same.

Keywords- Sacred Groves-Kavukal, Thalappoli, Dolmen, Dolmenoidcist Vanadurga.

The Kavukal or sacred groves found in the countryside of various parts of India are a smaller version of the forest. 'Kavvu' in Malayalam vernacular language means a garden or a group of wildy growing trees.¹ A small spot where shrubs and trees are said to grow 'wildly'. These Kavukal play an important role in determining the climate of a particular locality.

Kavukal² which are seen throughout Kerala, are the remnants of the primitive tribal culture dates back to the Megalithic period. Even though belief systems and ritual practices are different based on the geographic location as well as ethnographic variations, most of them are directly or indirectly associated with the megalithic practices of our ancestors from the pre-Dravidian era. 'A common feature of these sacred groves are they mostly

distributed along the plains and lower elevations where Megalithic burials that we find today. These lower elevations of hill sides has an average altitude of 450 m with a permanent water source and places which are away from dense forests. Such a place was ideal for tribes with primitive iron weapons and technology.

Another distinctive feature of a sacred grove is the worship of a powerful and fierce deity there.³ It is a common belief that the holiness of this area has to be strictly maintained. For this reason, people usually come to the Kavu to pray with utmost respect as well as cleanliness and purity, and they would never violate the restrictions and regulations set by the ancestors such as cutting down the trees and destroying the wilderness.⁴ Most of the deities in these sacred groves were iconostases in nature representing wilderness but with the course of time they were amalgamated with the Brahmanical or Vedic Gods and Goddesses. Gradually, indigenous rituals also got modified.

The concept of deities began to take shape when tribal religions have blended with other faiths of non-tribal groups. Pathini, Yakshi and Gandharva were influenced by the Jain and Buddhist streams, followed by Vanadurga and the Naga deities with the advent of the Vedic religion. Vanadurga is the Goddess of the forest lands. All of these were intertwined with "secular" or "bigotry" and received various forms of worship in Kavus.

Many deities came together as tribal deities in various forms such as Antyalan, Ayalachi, Chathan, Marutha, Karinkuttiyan and Valyachan. Some of the tribal deities were transformed into heroic figures from epics of India; Ramayana and Mahabharata. The various forms of idols, such as Ghantakarna, Ananthan and Vasuki, were modified to suit the Vedic Brahmanical rites and the rituals represent such. Bhagavati is the serene mood of the Goddess where as Bhadrakālī is her fighting and ferocious manifestation.⁵ The open spaces, as well as the floors where rituals/sacrifices are made also, underwent such transformations as the Kavukal. The people and their priests, who had practiced tribal worship in the past, gave way to new practices. Along with the large backyards, the serpents also survived as a descendant of the serpent worship of certain Dravidian communities.

Although there is a general belief that these sacred groves are formed in connection with the various cults that exist today, that does not seem to be true. The history of the transformations that took place between faith and worship during the long journey of human society can be traced back to the Kavus. In fact most of the rituals associated with sacred groves such as Sarppappattu (songs offering to serpents) and Theyyam (folk dance commonly seen in North Kerala) are closely connected with the ancestral and animistic worship of the indigenous people of Kerala dates back to Iron Age.

Kurinjikkavu (9.8272° N, 76.6803° E) is a sacred grove of four acres of rich vegetation located in the small village known as Kurinjigramam in the north-eastern part of Ramapuram Panchayath on the Pala-Thodupuzha route in Kottayam district of Kerala. This village is situated on the foothills and plains of surrounding three hills namely; Kurinjikumban, Kottamala and

Kuravankunnuon the border of Kottayam and Idukki districts. The altitudes of the hills are approximately around 242 to 260 metres. These hills are also home to many rare species of flora and fauna. Rich and unique varieties of flora such as *Kalmanikyam* and fauna *Raufaindica* are noticed here.⁶ A small non perennial stream called *Kurinjikariyilamthod* surrounding the hill valley flows during monsoon season which flourishes the lush greenery here. These hills help in getting rain in the Pala region. These mountains, which lie flat on the east and west, block the south-westerly winds.



Entrance of Kurinjikkavu (courtesy: Sidharth Thomas George)

Hillocks called Kurunjimala/Kurunjikoomban are the southern end stretch of the Western Ghats spread around 10-15 km bordering Kottayam and Idukki districts. In Sangam literature Kurinji is the Eco zone consisting hills. So the name Kurinji mala might have derived from this. The exact location of Kurinjikkavu (Latitude 09049'.732" N; Longitude 0760 40'.536'), (Elevation 78 M) is the North- Eastern side of Kuravankunnumala which is a part of Western Ghats in Pala -Thodupuzha route in the Ramapuram Panchayat. It approximately spreads over four acres of land, and is one of the major forest in Kottayam district of Kerala.

There are also several tribal places of worship in different parts of the hill country. Kurinjikkavu and Muthiyarkkavu are two of them. Kurinjikkavu, which is densely forested with various vegetation, is considered to be left over by the farmers when clearing the forest for cultivation. All other surrounding hill sides are cleared and converted into farmland. The sanctum sanctorum and the nine temples dedicated to Vanadurga have been preserved since ancient times.

Kurinjikkavu and surrounding areas are megalithic sites also. The megalithic site of Kurinji was primarily excavated by Archaeological Survey of India. Fragments of twelve Muniyaras and Palutharas (the local names of Dolmen and Dolmenoid Cists)⁷ which are similar to those found from the highlands of Marayur in Idukki district have been discovered from here. The Dolmens are also known Kalmesha or stone table. Several clusters of dolmen are noted within Kurinjikkavu.



Pazhuthara in Kurinjikkavu



Sarppakkavu in Kurinjikkavu

Presently a roofless temple is constructed in the kavu, thus by confirming the deity as *Vanadurga*. Aniconic form of stones in the concept of Ayila Yakshi, Athimahakalan, Vellambhagavathy, Sasthavu along with some weapons are placed inside the shrine.⁸

The sacred grove of Kurinjikkavu is famous for its unique ritual of Thalamthullal. Where men use to perform a ritual dance on Malayalam Month Meenam called *Thalamthullal*.

Thalappoli is a ritual procession traditionally taken out by women and young girls which said to attract prosperity to community.⁹ Here in Kurinjikkavu the Thalappoli is carried out by men on a special occasion. This is a very rare men's dance is held only here in Kerala itself.

In Kurinjikkavu Thalamthullal conducts every year as part of Prathishtadina Maholtsavam or idol installation festival. It organises on the day of Makam, in the Malayalam month meenam. It is a ten days festival starts with Ganapati Homam a ritual sacrifice to seek the blessings from Lord Ganapati to remove the obstacles and ends with *Pooram* on the tenth day.¹⁰

Prior to the Thalamthullal, various rituals are performed such as SarppaPooja or Serpent worship and Deeparadhana or lighting sacred lights. Each person who is performing the Thalamthullal have to carry one thalappoli. It is a metal plate is filled with rice, flower and a lighted lamp. The cost for each Thalam is twenty five rupees.

In order to take the Thalam, Men have to take the “Vrutham” or special fasting for seven days. They are not allowed to eat meat, fish or any non-vegetarian food items. Seven days prior to the Thalappoli, they have to follow certain observance such as take bath every day before eating breakfast.

On the day of Thalappoli men have to wear white Kasavumundu (Kasav Dhoti) and Melmund (upper cloth), traditional dresses for men in Kerala. Next process is to fill the Thalam with flower, rice and a lighted lamp. After that the men surround the Sri Kovil or sanctum sactorium and reaches in front of Pindivilakkor aspecial kind the plantain stem lamp and there they will drop the Thalam from the plate and starts the ritual dance or Thalam Thullal. Earlier it was only twelve men were only allowed to perform but now a days, a number is increasing.



PurushaThalappoli (courtesy: Rajeev Pallikkonam)

The steps of the Thalam Thullal is also unique. Performers has to take three steps to each side. While moving to each side one should change the legs according to the direction. If the move is to the left side, the men should move in their left leg and so as the right side. One can use only one leg at a time to show the resemblance with the Anthimahakalan from the legend. Men should also change the Thalam in between the hands while they change the direction. Gradually with the rise in the tempo of the Chendamelam or ethnic drum ensemble the speed of the dance also increases and men starts to sway their body slowly at first and steadily ascending in tempo to gain the blessing of goddess.

People from different parts of Kerala comes here for the performance of the ritual. In association with Thalam Thullal, another ritual named “Thalayattam Kali” is also performed here. This act is very similar to the Mudiattam and the woman from the Pulaya community performs it on the same day.¹¹



Seeking Blessings from Sanctum sanatorium (courtesy: Rajeev Pallikkonam)

The legend behind this distinctive ritual is also interesting. It goes like this, Once upon a time, demonic groups began to lustfully persecute women on earth. When the demons attacked the women of Earth, they prayed to Goddess Parvati to save them from the demons. Seeing the helpless women being massacred, Goddess Parvati appeared as Bhadrakali and slaughtered the demons with her sword. But the anger of the Goddess grew further and she became more furious and she began to kill all the men from the earth. When situation is worsening, the devotees prayed to Lord Shiva to save them from the sword of the Goddess, and Lord Shiva appeared in the form of Anthimahakalan to appease the Goddess. But the Bhadrakali could not control her anger, she unknowingly cut off the leg of Lord Shiva. Immediately she realized that it was her husband and she held his foot in her left hand without falling to the ground. The hanging of a leg is reminiscent of the last great man who lost a leg.

Here the Bhagavatikolam or the traditional decorative art with colors and rice flour represents Bhagavati as furious as walking with sword in one hand and blood dripping leg of the Mahadeva in another hand. Here, Spiritual identification with nature and fertility and antecedents are perfectly intertwined with the rituals of Kavay.¹² As per the legend, in order to commemorate this, men take the rhythm and dance according to the rhythm to seek blessings from Bhagavati and to reduce her anger for their sins.

In connection with the festival at Kurinjikavu, This ritual has been going on since ancient times at the Vanadurga Temple in Kurinjikavu, one among the 108 Durgalayas in Kerala. While the Thalamthullal is happening women from every household has to seek the blessings from the Bhagavati along with men.



Interview with Sri. Ramesh Kuzhikkandathi (courtesy: Sidharth Thomas George)

The exact history of the Thalamthullal in Kurinjikkavu is not known. Currently the Kurinjikkavu is preserved and well maintained by the trusteeship of Kuzhikkandathil Tharavadu (Family). This family has a long legacy of upholding the rituals and practices over four hundred years. It is said that the ancestors of Kuzhikkandathil Tharavadu have received the land from a Brahmin community here with the assurance from the family members to keep the Kavu with utmost care and ritualistic. The present secretary of kurinjiDevaswam, Sri. Ramesh Kuzhikkandathill remembers that earlier it was a tradition of the family to invite men from twelve popular families around Kavu for Thalamthullal during the festival days. The eldest male member of the family has to go in person to invite them. But now the tradition has got changed a lot. There is no such a strict number of men to perform now a days. Any number of men who has taken the fasting can take part in the Thalamthullal.

Discussion- Kurinjikkavu is a perfect example of this confluence of the two faiths Hinduism and Tribal worship. Mala Arayar tribe were the prominent tribal community lived in the Meenachil and Kanjirappally Taluks of Kottayam District.¹³ They have this practice of ancestral worship and other Megalithic practices that still continuing today. Thus we can assume that this Kavu and adjoining areas must have been the settlement areas of the Mala Aarayar tribe, but with expansion of agriculture Mala Arayar community lost their land and most of them receded further hilly regions. Many of the Mala Arayar people can be seen in Adimaly and Kurangadu areas of Idukk districts where they work as plantation workers in pepper and cardamom plantations.¹⁴

Even though then onwards the Kavu and the surrounding areas were controlled and Managed by other communities like Brahmins and Nairs, The sanctum sanctorum has been preserved since ancient times due to the existence of a shrine dedicated to Vanadurga and its nine temples. The dolmens are preserved here intact by giving separate fences for each one of them. Interestingly, as per the locals, the temple itself is constructed over a dolmen. From this, it is clear that other communities were also well aware of the importance and sanctity of this place and they dedicated it for the sole purpose of ancestral worship only. Similar kind of megalithic practice can identify from the surrounding areas. The continuation of ancestral worship and practice of some rituals such as “Vellamkudi” by the Malavedar tribe in the adjacent

Muthiyarkavu shows the strong continuation of Megalithic legacy here.

With the expansion of Vedic religions and other sematic religions a wide range of alterations were also happened with Tribal rituals and practices. Such modifications can be seen all those practices. This give and take policy and sometimes strict separation also can be note in various places. Indeed the sacred groves have witnessed multitude of culturally significant social interactions over generations. 'PurushaThalappoli' of Kurinjikkavu is a perfect embodiment of this notion.

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A Social Perspective on Empowering Women in India

•Akhilesh Shukla

Abstract- *The principle of gender equality is enshrined in the Indian Constitution in its Preamble, Fundamental Rights, Fundamental Duties and Directive Principles. The Constitution not only grants equality to women, but also empowers the State to adopt measures of positive discrimination in favour of women. A review of government's various programmes for women empowerment such as Swashakti, Swayamsidha, Stree Shakti, Balika Samrudhi Yojana and another two thousand projects reveal that little has been done or achieved through these programmes. The discrepancy in the ideology and practice of the empowerment policy of women in India constitutes its continued social, economic and social backwardness. Women make up 49% of our country's population hence there can be no progress unless their needs and interests are fully met. Empowerment would not hold any meaning unless they are made strong, alert and aware of their equal status in the society. Policies should be framed to bring them into the mainstream of society. It is important to educate the women. The need of the hour is to improve female literacy as education holds the key to development.*

Keywords- *Gender equality, Fundamental Rights, Discrimination*

As India strives toward equal rights, a change in the perceptions of men and women is needed to reduce gender disparity. In simple terms, empowerment means giving power or authority to an individual. The empowerment of women has been extensively debated and written about all over the world. Sociologist Dhruba Hazarika has rightly said that empowerment of women means equipping them to be economically independent, self-reliant, in addition to providing positive self-esteem to face any difficult situation. Women should be equipped enough to participate in any development process. The meaning for women empowerment is to give rights & power to women to come up in life to challenge against it. Empowering Women aims to inspire women with the courage to break free from social and cultural evils of the society. When and where women are given power they can perform their role effectively, everywhere. The women empowerment in India is a pre-independence concept. Empowerment refers to increasing the spiritual, political, social or economic strength of individuals and communities. It often involves the empowered developing confidence in their own capacities. Empowerment is probably the totality of the following or similar capabilities:

- Having decision-making power of their own
- Having access to information and resources for taking proper decision

- Having a range of options from which you can make choices (not just yes/no, either/or.)
- Ability to exercise assertiveness in collective decision making
- Having positive thinking on the ability to make change
- Ability to learn skills for improving one's personal or group power.
- Ability to change others' perceptions by democratic means.
- Involving in the growth process and changes that is never ending and self-initiated
- Increasing one's positive self-image and overcoming stigma

The principle of gender equality is enshrined in the Indian Constitution in its Preamble, Fundamental Rights, Fundamental Duties and Directive Principles. The Constitution not only grants equality to women, but also empowers the State to adopt measures of positive discrimination in favour of women.

Within the framework of a democratic polity, our laws, development policies, Plans and programmes have aimed at women's advancement in different spheres. From the Fifth Five Year Plan (1974-78) onwards has been a marked shift in the approach to women's issues from welfare to development. In recent years, the empowerment of women has been recognized as the central issue in determining the status of women. The National Commission for Women was set up by an Act of Parliament in 1990 to safeguard the rights and legal entitlements of women. The 73rd and 74th Amendments (1993) to the Constitution of India have provided for reservation of seats in the local bodies of Panchayats and Municipalities for women, laying a strong foundation for their participation in decision making at the local levels.

Goal and Objectives- The goal of Empowerment of Women Policy is to bring about the advancement, development and empowerment of women. The Policy will be widely disseminated so as to encourage active participation of all stakeholders for achieving its goals. Specifically, the objectives of this Policy include

- Creating an environment through positive economic and social policies for full development of women to enable them to realize their full potential
- The de-jure and de-facto enjoyment of all human rights and fundamental freedom by women on equal basis with men in all spheres - political, economic, social, cultural and civil
- Equal access to participation and decision making of women in social, political and economic life of the nation and
- Equal access to women to health care, quality education at all levels, career and vocational guidance, employment, equal remuneration, occupational health and safety, social security and public office etc.

Social Empowerment of Women-

Education- Government of India have announced in their policy that Equal access to education for women and girls will be ensured. Special measures will be taken to eliminate discrimination, universalize education, eradicate

illiteracy, create a gender-sensitive educational system, increase enrolment and retention rates of girls and improve the quality of education to facilitate life-long learning as well as development of occupation/vocation/technical skills by women. Reducing the gender gap in secondary and higher education would be a focus area. Set oral time targets in existing policies will be achieved, with a special focus on girls and women, particularly those belonging to weaker sections including the Scheduled Castes/Scheduled Tribes/Other Backward Classes/Minorities. Gender sensitive curricula would be developed at all levels of educational system in order to address sex stereotyping as one of the causes of gender discrimination.

Health- A holistic approach to women's health which includes both nutrition and health services will be adopted and special attention will be given to the needs of women and the girl at all stages of the life cycle. The reduction of infant mortality and maternal mortality, which are sensitive indicators of human development, is a priority concern. This policy reiterates the national demographic goals for Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR) set out in the National Population Policy 2000. Women should have access to comprehensive, affordable and quality health care. Measures will be adopted that take into account the reproductive rights of women to enable them to exercise informed choices, their vulnerability to sexual and health problems together with endemic, infectious and communicable diseases such as malaria, TB, and water borne diseases as well as hypertension and cardio-pulmonary diseases. The social, developmental and health consequences of HIV/AIDS and other sexually transmitted diseases will be tackled from a gender perspective. To effectively meet problems of infant and maternal mortality, and early marriage the availability of good and accurate data at micro level on deaths, birth and marriages is required.

The Constitution of India grants equality to women in various fields of life. While doing research in the field of rural leadership in Rewa district of Madhya Pradesh we found that yet a large number of women are either ill equipped or not in a position to propel themselves out of their traditionally unsatisfactory socio-economic conditions. They are poor, uneducated and insufficiently trained. They are often absorbed in the struggle to sustain the family physically and emotionally and as a rule are discouraged from taking interest in affairs outside home. Oppression and atrocities on women are still rampant in Princely India areas of Rewa State. Patriarchy continues to be embedded in the social system in many parts of India, denying a majority of women the choice to decide on how they live. The over-riding importance of community in a patriarchal sense ensures that women rarely have an independent say in community issues. Female infanticide continues to be common. Statistics show that there is still a very high preference for a male child in states like UP, MP, Rajasthan, Bihar, Punjab etc. The male to female ratio is very high in these states. Domestic violence is also widespread and is also associated with dowry. Leaving a meager number of urban and sub-urban women, Indian women are still crying for social justice.

Empowerment would become more relevant if women are educated, better informed and can take rational decisions. It is also necessary to sensitize the other sex towards women. It is important to usher in changes in societal attitudes and perceptions with regard to the role of women in different spheres of life. Adjustments have to be made in traditional gender specific performance of tasks. A woman needs to be physically healthy so that she is able to take challenges of equality. But it is sadly lacking in a majority of women especially in the rural areas. They have unequal access to basic health resources and lack adequate counseling. The result is an increasing risk of unwanted and early pregnancies, HIV infection and other sexually transmitted diseases. The greatest challenge is to recognize the obstacles that stand in the way of their right to good health. To be useful to the family, community and the society, women must be provided with health care facilities.

Most of the women work in agricultural sector either as workers, in household farms or as wagedworkers in Rewa district 40.4% agricultures labours are female. Yet it is precisely livelihood in agriculture that has tended to become more volatile and insecure in recent years and women cultivators have therefore been negatively affected. The government's policies for alleviating poverty have failed to produce any desirable results, as women do not receive appropriate wages for their labour in rural areas. There is also significant amount of unpaid or non-marketed labor within the household. The increase in gender disparity in wages in the urban areas is also quite marked as it results from the employment of women in different and lower paying activities. They are exploited at various levels. They should be provided with proper wages and work at par with men so that their status can be elevated in society.

In recent years there have been explicit moves to increase women's political participation. The Women's reservation policy bill is however a very sad story as it is repeatedly being scuttled in parliament. In the Panchayati Raj system, however, women have been given representation as a sign of political empowerment. There are many elected women representatives at the village council level. However their power is restricted, as it the men who wield all the authority. Their decisions are often over-ruled by the government machinery. It is crucial to train and give real power to these women leaders so that they can catalyst change in their villages regarding women. All this shows that the process of gender equality and women's empowerment still has a long way to go and may even have become more difficult in the recent years.

The main reason for the contradiction is that, targeted schemes tend to have only limited impact when the basic thrust of development is not reaching an average woman, making her life more fragile and vulnerable. To make a positive change basic infrastructure should be provided in every village and city. To begin with, providing safe drinking water supply and better sanitation not only directly improved the lives and health of women but also reduces their workload in terms of provisioning and ensuring such facilities. An access to affordable cooking fuel reduces the need to travel

long distances in search of fuel wood. Improved transport connecting villages with each other and with towns can also directly improve living conditions as well as unpaid labour time spent in transporting household items. It can also lead to access to a wider range of goods and services plus a better access to health facilities. Expenditure on food subsidy and better provisions for public distribution services directly affects the lives of women and girl children in terms of adequate nutrition. The patterns of resource mobilization by government also have significant effects on women that are usually not recognized. When taxes are regressive and fall disproportionately on items of mass consumption, once again these tend to affect women more. This is not only because the consumption of such items may be curtailed but also because the provisioning of such items is frequently considered to be the responsibility of the women of the household. Also credit policies reduce the flow of credit to small-scale enterprises thus reducing the employment opportunities for women. There is a need to have women-friendly economic policies that can enhance their social and economic position and make them self-reliant.

There is no doubt about the fact that development of women has always been the central focus of planning since Independence. Empowerment is a major step in this direction but it has to be seen in a relational context. A clear vision is needed to remove the obstacles to the path of women's emancipation both from the government and women themselves. Efforts should be directed towards all round development of each and every section of Indian women by giving them their due share.

We have to accept the fact that things are not going to change overnight but because of this we cannot stop taking action either. At this juncture the most important step is to initiate ground level actions however small it might seem. The ground level actions should be focused towards changing the social attitude and practices prevalent in the society which are highly biased against women. This can be initiated by working with the women at the root level and focusing on increasing women's access and control over resources and increasing their control over decision making. Further working on the aspect of enhanced mobility and social interaction of women in the society would positively influence all round development and empowerment of women in India. One of the major aspects of women empowerment in India is to change the attitude of society towards women. The problem in India is that the society never worked on the premise of gender equality from a long-long time. Atrocities and discrimination against women is a way of daily life in Indian society. There is an attitude which still prevails in India where women are considered to be only worthwhile of household activities and managing the children. The veil system, child marriage and dowry are testimonies to this truth. Women have never been part of the mainstream society in India and they are still considered as a great liability. If we just look at the sex ratio it will show the plight of women in India. It is the lowest at around 933. Female literacy is just 54.16 % as per 2001 Census. In Indian parliament and assemblies women have never represented more than 10%. Most of the women workers in India are outside the organized sector.

Administrators, managers, professionals combined together and technical workers on the other hand are the lowest at 2.3% and 20 % respectively. Now these figures give the real truth of the actual mentality of the society which has restricted women, marginalized women and discriminated against women quite openly. Can we achieve women empowerment in India with these alarming and dismal figures?

There are quite a large number of issues which need to be addressed to streamline the existing women empowerment programmes in India as well as initiating actual work at the ground level. Women make up to 48% of country's population but their living conditions are very tough and torturous. To initiate measurable actions at ground level, education of women should be given top priority and female literacy programmes need to be enforced across the country. Further to improve the socioeconomic conditions women need to be trained and better equipped for taking informed decisions. The real change will be only visible when social attitudes and norms change. Here inclusive programmes involving the men are the need of the hour. This will be helpful for working out adjustments and sharing of gender based specific performance or tasks which are currently overburdening the women to no end. Unless we improve the ground level living standards of women in India we might not be able to influence their empowerment in any other possible way. Various issues that need to be addressed for improving overall conditions of the women in India include making access to affordable cooking fuel for rural women, providing safe drinking water, sanitation, increasing decision making capacity among women, providing equal wages as that of men, ending their exploitation, improving the political participation of women, eradicating poverty among women, increasing the security of women who are engaged in agriculture as daily wage workers, providing affordable healthcare and nutrition and managing the risk of unwanted pregnancies, HIV infections and sexually transmitted diseases.

When we talk about women empowerment in India the most important aspect that comes into the mind is the attitude of the society towards women. In fact the society has yet not accepted the feeling of the preamble of the constitution i.e. we (Both men & women) the people of India. Women are still considered as burden and liabilities. They are also considered as properties. These kinds of attitudes give birth to the evil of violence against women. Women empowerment in India is not possible unless violence against women is eradicated from the society. National Commission of women was created in 1992 and Convention of elimination of all forms of discrimination against women was ratified in 1993. Apart from the laws and policy formulations the violence against women can be only tackled through attitudinal change that needs to take place in the family, in the society and the female members of the society as well. Only this attitudinal change and proactive action against violence by every single individual will help in galvanising the slumbering structures of the government and society towards further concrete steps and action. Unless society accepts gender equality as a fundamental principle of human existence all efforts will only partially bear results. Gender sensitisation and gender training is primary

need of the hour. The struggle of gender equality should be carried at every level and it should overcome the barriers of caste, class, race and religion. To reemphasize once again, women's empowerment cannot take place unless women come together and decide to self-empower themselves. Self empowerment should be all round in nature. Once this happens then we can think about galvanizing the system towards the direction of better health facilities, nutrition and educational facilities for women at a very large scale. Self empowerment can begin by addressing day to day issues faced by individual women and tackling them with a mindset of improving the overall living conditions of women at every level and strata of the society. A movement has to be build which awakens the individual self in each and every woman for creative and generative action. In this regard progressive and resourceful women in the society need to come forward to help their less privileged sisters in as many ways as possible. This shall help us sow the seed for real women empowerment in India. This site envisions the rise of womanhood in true sense that is the rise of the "essence" of womanhood in the physical, mental, intellectual and the spiritual planes. It calls for the beginning of a campaign for the true rise of women in all spheres of life for the restoration of the balance in nature. Somewhere we have to make a beginning and it's always better if we make the initiation at our own self. We can strengthen this mass movement for the "rise of womanhood" by bringing about the necessary changes in our own life as felt by our inner self. Further we can transmit the new thinking to others who care to listen. A small step today will definitely lead to a giant leap tomorrow.

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An Overview of Processed Food Industry in Bihar Challenges and Opportunities

• Saba Haidri

Abstract- Bihar holds the major fertile land in the country. The state of Bihar lies completely in the subtropical region of the temperate zone and its climatic type is favourable in producing the agricultural products. The state (Bihar) enjoys one of the fertile soils in the country. Principal food crops are paddy, wheat maize, and pulses. Main cash crops are sugarcane, potato, tobacco, oilseeds, onion, chillies and jute. Now, demand growth for processed food products has been rising with growing disposable income, urbanization, a young population & rise in the number of nuclear families. Processed food industry is one of the major industries in our country wherein Bihar ranks 11th of the 15 major states in terms of social and economic infrastructure coupled with fact of ever growing population with an increasing purchasing power and changing lifestyle, the state (Bihar) thus offers an immense opportunities to establish wide range and big numbers of processed food units.

Keywords- Food Industry, Agricultural products, Crops

Introduction-Food industry in Bihar has endorsed strong growth over the decades. Bihar is one of the largest producers of processed food in the country. The total food production (processed foods) in Bihar is likely to double in next five years. Bihar's processed food industry is currently worth Rs. 40,000 crore including beverages, and is expected to grow at the rate of 11 percent by 2022. According to 'Indian Food service Report by National Restaurant Association of India (NRAI), with huge agricultural sector, abundant livestock, and competitiveness, Bihar is fast emerging as a sourcing hub of processed foods in India.

Bihar holds one of the largest arable lands in the country. With different Agri-Climatic regions, all major climates exist in the state of Bihar. The state (Bihar) also possesses fertile soils helping in favorable production of agricultural products. Bihar is the largest producer of pulses, milk, mangoes, wheat, sugarcane and rice. Demand growth for processed food has been rising with growing disposable income, urbanization, a young population and rise in the number of nuclear families. Domestic food spending is expected to increase in all states of our country. The Government of India (GOI) expects US\$ 21.9 billion of investment in food processing infrastructure and has also launched infrastructure Development scheme to Increase investments in processed food infrastructure. Investments, including foreign direct investments (FDI), will rise with strengthening demand and supply fundamentals (<http://www.ibef.org>). Food processing industry is one of the largest industries in India, ranking fifth in terms of

production, growth, consumption, and export and Bihar is one of the major contributors for its growth in the country.

Economic liberalization and rising consumer prosperity is opening up new opportunities for diversification in Processed Food Sector. Liberalization of world trade will open up new vistas for growth. The Processed Food Industry has been identified as a thrust area for development. This industry is included in the priority lending sector. Processed Food involves any type of value addition to the agricultural produce starting at the post harvest level. It includes even primary processing like grading, sorting, cutting, seeding, shelling packaging etc. The food processing sector comprises six major segments:

- Fruits and Vegetables
- Meat and Poultry
- Fisheries
- Grain Processing
- Non- Alcoholic Beverages

Bihar Agri-Business (Processed Food Industry): Key facts:

Processed Food Industry of the state Bihar is talked as the next big hope for agricultural sector in the country and also remains the most crucial factor for the growth of state economy.

Processed Food Industry in Bihar provides huge employment opportunities as well as major player for the growth of state GDP. Food Production and Processed Food contribute more than 55 percent to the GSDP employing over 80 percent of the workforce. Bihar ranks 11th of the 15 major states in terms of social and economic infrastructure. Annual survey of the industries reveals that only about 1500 industries are operating in the state.

There is a huge business opportunity for processed food industry in Bihar, as in Bihar with a huge population (Say 90 million) and a population growth of about 2.43 percent per annum, is a large and growing market. Processed Food is the largest component of private consumer expenditure, accounting for as much as 69 to 65 percent of the total. With calculated estimate, the current market for Processed Food in Bihar is approx. 40,000 crore including beverages.

Major Challenges for the Processed Food Industry in Bihar- Processed Food Industry in Bihar is facing constraints like non-availability of adequate infrastructural facilities, lack of ad equality control & testing infrastructure, inefficient supply chain, and seasonality of raw material, high inventory carrying cost, high taxation, high packaging cost, affordability and cultural preference of fresh food. Unprocessed foods are prone to spoilage by biochemical processes, microbial attack and infestation. Good processing techniques, packaging, transportation and storage can play an important role in reducing spoilage and extending shelf life. The challenge is to retain the nutritional value, aroma, flavor and texture of foods, and presenting them in near natural form with added conveniences. Processed foods need to be offered to the consumer in hygienic and attractive packaging, and at low

incremental costs. Major challenges for the Processed Food Industry in Bihar are-

- Absence of Comprehensive national level policy on food processing sector.
- Food Safety Laws & Inconsistency in State and Central Policies.
- Lack of adequate trained manpower.
- Inadequate Infrastructure.

Strengths and Opportunities- The future of the farmer of Bihar depends on the success of the food industry as Bihar's Prosperity is predominantly linked to the growth of incomes in the agrarian sector of the economy; increasing liberalization of the economy has tried to lift the protection that the food and agriculture sector once enjoyed in the country. This has exposed the sector both to the opportunities and challenges of the global food economy.

Conclusion- The processed food industry in Bihar presents a very large opportunity to every stakeholder. This is primarily driven by robust consumer demands, the changing nature of the state's consumer, who is more informed and willing to try new products; and the strong production base of the country. Needles to add, the several gaps in the current production and delivery systems actually present a huge opportunity for the growth of companies willing to bet long term in this sector. However, the growth of food processing companies has been sub-optimal because of high cost, low level of productivity, high wastage and lack of competitiveness of Indian food products in the global market. Therefore, to fully leverage the growth potential of the sector, current challenges that are being faced by the industry need to be properly addressed and steps need to be taken to remove the bottlenecks hampering the pectoral growth.

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A Critique of Implementation of Municipal Solid Waste (MSW) Handling Rules, 2016 for Mumbai Megacity

• Chandani Bhattacharjee

Abstract- *The Union Ministry of Environment, Forests and Climate Change notified and introduced the Municipal Solid Waste Management (MSW) Rules 2016, thereby replacing the existing Rules MSW of 2000. This paper is a half decadal review of the policies adopted, implemented and executed for the megacity of Mumbai. The city of Mumbai, produces over 6661 MT (MCGM,2019) as per the MCGM and the amount has only been compounding over the years, due to a severe population pressure and the percapita waste generated has also been 0.63kg per capita per day. However, as per the previous amounts suggested by the MCGM, the quantity of waste generated per day has been 7700 MT, till 2016. The introduction of the measures and implementation post 2016, may be instrumental in the reduction of the total generated waste for Mumbai megacity. The waste generated one of the highest among the other ULBs in Maharashtra, and hence the administration of the city has attempted to implement segregation, composting, manufacturer onus in waste disposal, reviews by agencies and community sensitisation. It has met with challenges such as waste creation quantity, inability to service all areas in the city, lack of new sites for waste disposal to name a few. The objective of this paper is to review the success and the failures to be able to provide better waste management to the maximum city.*

Keywords- *MSW, MSW Rules, 2000. MSW Rules 2016, Waste management*

Introduction-

"I only feel angry when I see waste. When I see people throwing away things we could use."

Mother Teresa

Wastes are described as anything which ceases to have value to man and thereby is discarded post usage. There are several kinds of wastes that have been identified, Municipal Solid Waste(predominantly the household and commercial establishment generated), Biomedical Waste(generated in Hospitals, Nursing Homes and Care centres), Electronic Waste(discarded and used electronic devices),Hazardous Waste (generally from radioactive wastes, industries, domestic, are harmful) and Industrial waste (those emanating from factories and industrial sites). There are also Plastic Waste, which is the discarded plastic products and form a concerning category of waste, Construction and Demolition Waste as generated from construction sites, renovations and infrastructure building. All the described wastes have impacted the environment in pollution, reduction of quality of water, air and land, deforestation, health impacts on inhabitants, and impact on the biota,

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foul smell and lack of hygiene in the places they are disposed. Some of the wastes are toxic and hazardous and hence they need to be handled specifically by the handlers, the institutions generating them and the governmental bodies monitoring them. The Government of India under the Ministry of Environment, Forests and Climate Change in association with its Pollution Control Boards have been ensuring that the wastes are handled in scientific way as possible and hence the series of guidelines that have been provided to the citizens. The Report of Ministry of Urban Development (MoUD, May 2000)), Government of India, suggests that 1, 00,000 MT of Municipal Solid Waste was generated daily in the country and Mumbai is the second largest producer of municipal solid waste in the country, after Delhi.

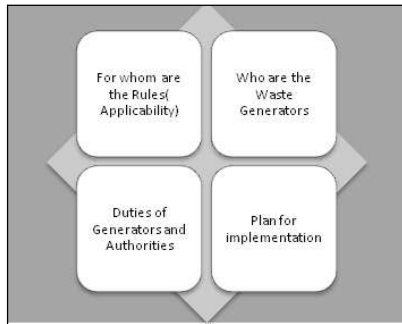
Defined as, “solid or semi-solid domestic waste, sanitary waste, commercial waste, institutional waste, catering and market waste and other non-residential wastes, street sweepings, silt removed or collected from the surface drains, horticulture waste, agriculture and dairy waste, treated bio-medical waste excluding industrial waste, bio-medical waste and e-waste, battery waste, radio-active waste generated in the area under the local authorities and other entities.” by the MSW Handling Rules, 2016. Solid wastes form one of the most significant waste created and needs attention in urban India. The sheer volume and the nature of the waste have enabled the development of methods to manage and reduce the waste generated.

History of Waste Policy- The history of solid waste management can be divided broadly into, the Ancient phase, the Medieval to pre independence phase and the Post-Independence Phase. The Ancient phase in India is associated with the Kings and Maharajas ensuring that the city's refuse would be taken outside the city limits by carriage or carts and animals. In fact, in ancient Patliputa, all carts entering the city was expected to carry waste out from the cities. The second phase saw the emergence of some laws and regulation more after the British dominance. There is an absence of any information about the manner in which the Mughals, and the South Indian kings or the Rajput and Marathas tackled the waste. Some of the concerning laws that would have some direction towards waste management was the 1860, Indian Penal Code, and these have indicated that “solid waste” was a public “nuisance” and hence the persons creating it would be made punishable. The third phase is the most formidable one. There have been several pre-existing laws indicating attention drawn towards waste, litter, penalty for pollution leading eventually to the MSW Handling Rules, 2016. The 1974, The Water (Prevention and Control of Pollution) Act, was only the beginning. The table given alongside shows the different concerning Policy and Rules that have become the backbone of the 2016 series of Waste Management Handling Rules not only for Municipal Waste but for Biomedical Waste, Construction and Demolition Waste, Plastic Waste, E waste etc. One of the most important contribution was made with the 2006, The National Environment Policy, which gave legal recognition and strengthened the informal sector systems of collection and recycling of waste. 2010, with the launch of the National Mission on Sustainable Habitat, two aspects got a renewed focus, importance of recycling of materials and

need for urban waste management for ecologically sustainable. The launching of the *Swachh Bharat Abhiyan*, was made by the Honourable Prime Minister in 2014, attempting to Clean India, through a series of initiatives, enabling the emergence of awareness towards cleanliness and impacting waste management and handling too. The Clean India Mission 2014 emphasized on cent per cent scientific disposal of municipal solid waste by 2019 and provides solid waste management services to 80% of the urban population.

Year of Implementation	Title of the Policy on Waste Management
1974	The Water (Prevention and Control of Pollution) Act
1975	The Water (Prevention and Control of Pollution) Rules
1981	The Air (Prevention and Control of Pollution) Act
1986	The Environment (Protection) Act
1995	The National Environment Tribunal Act
1997	The National Environment Appellate Authority Act
1998	The Bio-Medical Waste (Management and Handling) Rules -amended 2000, 2003
2000	Municipal Solid Wastes (Management and Handling) Rules - Amended 2000, 2016
2008	Hazardous Waste (Management, Handling & Transboundary Movement) Notified 2008
2010	National Green Tribunal Act 2011
2011	The Plastic Waste (Management and Handling) Rules
2011	E-Waste (Management and Handling) Rules

Defining MSW 2016 Rules- The Ministry of Environment & Forest notified the Municipal Solid Wastes (Management and Handling) Rules in 2000. It made it mandatory for municipal authorities to set up waste processing and



disposal facilities, identify sanitary landfill sites, and improve existing dumpsites. The outcome of the Rules 2000 was that, the compliance remained low due to municipalities not able to implement waste segregation. Also, lack of institutional and financial resources, made the Rules 2000, inadequate. This was followed by MSW Rules

2016, (Government of India, and MoEF& CC) on the 8th of April, 2016. The New Rules, were more balanced and covered adequately the requirements of Solid Waste Management. The Rules could be understood based on these four aspects, Applicability, Identification of Waste Generators, Role of Administration and Implementation Structure.

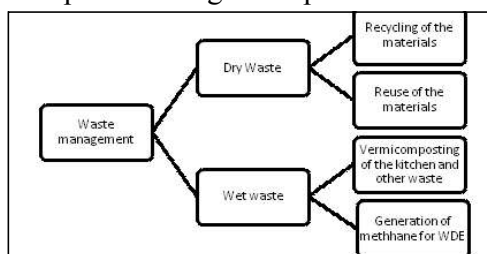
The synoptic features relevant to the study are listed below-

- The Rules are now applicable beyond Municipal areas and extend to urban agglomerations, census towns, notified industrial townships etc.
- The source segregation of waste to aid recovery, reuse and recycling .The waste to be segregated into three streams, Wet (Biodegradable), Dry (Plastic, Paper, metal, wood, etc.)
- Integration of waste pickers/ ragpickers and waste dealers/ *Kabadiwalas* in the formal system should be done by State Governments, and Self Help Group, or any other group to be formed.
- Burning of waste prohibited
- Generator will have to pay 'User Fee' to waste collector and for 'Spot Fine' for littering and non-segregation.

The two things that give this policy relevance and purpose are the concept of a time frame, wherein, every role of the administration is dated and mentioned. For example, the identification of a landfill would take one year and capping of old landfills about five years. And second, the concept of review by the various level of administration is also specified, for example, the Central Monitoring committee of MOEF& CC would review every year once. There has been a concept of bench marking of the urban local bodies which enable the mapping of the service delivery to the citizens on 8 parameters.

Mumbai and MSW- Mumbai has a huge amount of waste generated every day. Even though the areal spread of the city is not vast, 603 sq. kms, there are 24 administrative wards in it. The total population, as of 2011, is 1,24,42,373, (Census of India, 2011), producing 7700 MTPD, (2016,MCGM) (million tons per day). The Central Pollution Control Board with NEERI (2005-06) had conducted a survey of 59 cities and estimated Mumbai's waste generation to be about 5320 in TPD (2005-2006). So the waste amount has increased significantly from 2005 to 2018. The problem for Mumbai, is the management of waste, which includes collection, segregation, and transportation of waste and finally disposal of waste. Paucity of space in a city where land is premium, for locating the waste dump

yards is the most critical decision that needs to be taken. To manage this collected municipal solid wastes are currently disposed at the four major land fill or dump yards, Deonar, Mulund, Gorai and Kanjurmarg. Apart from these, several landfill sites existed previously in the city, which has been scientifically closed, for example, Chincholi Bander, Malad. The current four sites are located in the different wards of the city, Gorai in R Ward, Mulund in T Ward, Deonar in N and M Ward and Kanjurmarg in S Ward. There is transfer station at Mahalaxmi to enable material to be collected and transported in larger compactor vehicles.



Landfills have been the oldest and the most used manner of disposal of waste in the world and India as well. In Mumbai the following are the reasons for location of these dump yards in the four areas as specified, the available lands in the barren and unproductive areas

in the suburban wards, relatively lower population in these areas, any physiographic feature such as creek side or mangrove site, near the rocky hills, lack of proper guidelines for the location of dump yards(before the 2016 Handling Rules),non-allocation of lands for waste dump sites in the municipal land use maps, and finally, due to the lands available to the respective municipalities.

The Table 2 shows the dumpsites, the volumes of wastes they handle and the age of the sites. The oldest site Deonar has the largest area and is still in use. It receives the highest amount of waste about 5800 MTPD. (MCGM) The Gorai dump yard is a smaller site and receives a reasonable good quantity of waste from the adjoining wards 2200 MTPD (MCGM). The dump at Mulund is a smaller site with only 700 MTPD (MCGM) of waste generated. The Kanjurmarg site is a recently allotted area and with the closure of the other dump yards this will emerge as the single largest yard in the Greater Mumbai region. The location of the Kanjurmarg site is to the extreme east of the city and hence the costs of transportation of the waste would be immense.

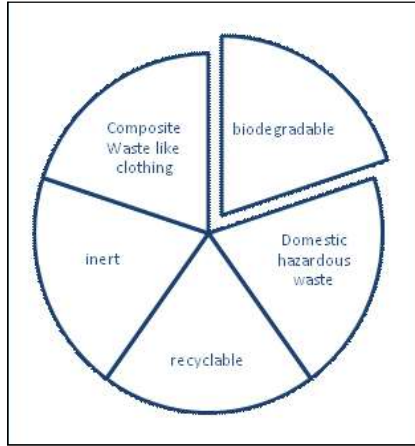
Table 02
Site-wise Information of the Waste Dumps in Use

Sl.N os	Location of the Disposal Site	Site Area in hect	Area available for Dumping	Nos of years in use	Remaining usable period	Amount of disposals received in MTPD
1	Deonar	131.12	116	51	9	4800
2	Gorai	25	18.45	16	2	2200
3	Mulund	24	16.60	16	2	700
	Total	180.12	151.05			7700

Source: MCGM& Environmental Status Report, 2016

Apart from landfills some of the other methods of Waste Management that are followed are, Incineration, Recycling, Biological Reprocessing, Waste Collection for Recovery and Energy Recovery.

Incineration is used to manage BMW and hazardous wastes in the MSW, and the waste is burned at very high temperature to destroy the organic constituents in the waste. Composting is another manner of waste management for the Mumbai based collected waste. All studies have indicated that, average waste in the bins of the households have around 60 to 70 % organic and wet waste in them. Segregation of waste removes them into the wet and the dry waste. The Dry waste is recycled while the wet waste is used for composting. MPCB Waste Identification, 2000



The Municipal Solid Waste Annual Report 2018-2019, for Maharashtra shows, that there are 384 urban local bodies (ULB), the total solid waste generated is 23844.55 TPD out of which 23,675.7 is collected. The total number of composting plants are 307, the vermicomposting plants are 76, biogas / bio methanization plants around 13. Door to door collection is undertaken in 384 ULBs and segregation is in 369 only (MSW Annual Report, 2018-2019). Maharashtra has 327 dumpsites and only 1 is reclaimed and capped.

MSW 2016 Handling Rules in Mumbai- The passing of the MSW Handling Rules, 2016, was instrumental in formalising the Waste Management sector. The Rules have been implemented in Maharashtra and the study area of Mumbai. The following are the aspects that have emerged as the success and failures of the 2016 Rules under study. The image given alongside shows the composition of the waste as generated in Mumbai as in many urban bodies. There is a predominance of the biodegradable element in the average bin of a household followed by the other contents such as recyclable such as paper, tins, cans, bottles, plastics etc., domestic hazardous waste such as batteries, clothing, and sanitary wastes among others.

- A. Identification and emphasis on the ULBs and allocating role of segregation and basic grassroots management to them. There are a total of 392 ULBs in Maharashtra. The highest amount of waste over 80% is generated in the Municipal Corporations.

Table 03
A summary of the SW in Mumbai Megacity

Name of the ULB	Class	Population	MSW Generated MT/Day	MSW Treated MT/Day	MSW Processing Facility	Transport Facility	Segregation %	Transport %
Municipal Corporation of Greater Mumbai	M C Class A	14111703	6661	5500	Composting, Vermicomposting, Biomethanisation, Refuse Derived Fuel	T 3 1040	82	100

Source: SWM Rules, 2016, State of Maharashtra

- A. Segregation percentage is 82 % (MPCB, 2019) for the city of Mumbai, with all its wards attempting to segregate the waste. The State average in segregation 74.46% and is a fairly a good for a state, 22945 TDP and city with over 6661 MT (MPCB) waste generated per day. Segregation takes place at source, which has been achieved by awareness drives conducted by the BMC along with the Advanced Local Managements, NGOs, National Service Students and citizens. The waste is segregated at the domestic household into, wet waste, which goes into the green bins, the dry waste which go into the blue bins and the domestic hazardous waste which is in black. Sanitary waste is disposed in brown paper wrapped bags with a red marking on them.
- B. Setting up of Waste Facilities, as specified in the Rules, within a period of one year the Municipalities have to set up Solid Waste processing facilities, sanitary landfills sites. Thus some projects that have been in the pipeline for better management are WTE plants at Deonar and Malabar Hills.
- C. The MCGM has directed all institutions with more than 5000sq meters, to segregate and compost their waste *insitu*. This would help in the reduction of transportation costs and pressure on the existing landfills. *The Harit Maha CityCompost* has been created on the basis of the SWM Rules, 2016, with all standards as required by the compost.
- D. Integration of the unorganised sector in waste handling and treatment, such as the recyclers, the rag pickers and the waste collecting and handling personnel have been attempted to be handed over protective gears and awareness about the nature of the waste and the new recycling rules.

Challenges in Implementation- The urban governing body for Mumbai, the MCGM has been actively attempting to manage waste. However there have been some shortcoming and challenges that the city tends to face. Population of Mumbai is huge and to compound that there is over 50 lakh floating population in the city. Migration, street side and pavement living and the slum dwellers have all contributed to the volumes of waste generated. It is also a problem in collection of the waste. Despite all visits by the compactor trucks, all roadside and kerbsides are not serviced. Several slum areas, the vehicles cannot enter the narrow paths. The Dattak Vasti Yojana or Slum Adoption Programme for sensitizing slum dwellers; it also encourages the citizens to take up initiatives at the grass root level has been worked to tackle this challenge. Advanced Locality Management (ALM), is a partnership between MCGM and citizens for sustainable environment friendly waste management for the neighbourhoods. Many NGOs such as the *Stree Mukti Sangatahan* have created projects like the Parivar Vikas Yojna, and attempted to uplift the women in the sector. However these initiatives come with several disadvantages in the form of, lack of sufficient initiatives provided to the citizens to come forward with the various

schemes, lack of consistency in the efforts by the Governments and lack of monitoring by any agency/ Councillor of the local area.

Conclusion- Waste in the 21st century needs to be handled responsibly. There have been many an occasion of leakage, unplanned disposal, and pollution of the urban fringes or dumpsites, along with degradation of the environment. The most vulnerable in the irresponsible handling of the waste are the very citizens who dump the waste. Therefore, all sustainable management of waste would need to involve the citizens, the ALMs, the NGOs, the multiple institutions which run an urban area and the specific Governmental Departments. The onus of the waste management does not have to remain in the governing bodies but shared through various community initiatives. The fragility of the planet would require that the urban ecosystems too need a management far more technically and scientifically safer than what exists today. The word sustainability would only then be understood in the correct parlance as it was devised to be used when the world was bereft of any positive reinforcement to handle the massive environmental degradation in the nineties. Continuous assessments of the environmental damages, adequate segregation at source, enabling policy and penalty for the polluting persons may just enable India to realign and enable large urban agglomerations to improve the waste carrying capacities within the existing frameworks.

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A study of Health Profile of Beedi workers in Memari I Block, East Bardhaman, West Bengal

• Anuradha Guha Thakurata

Abstract- *Beedi making is a popular cottage industry beedi rolling is one of the major informal sector activities in India. The government estimates that there are about 4.4 million workers in this industry and the majority is home based workers who live below poverty line. One of the reasons for the beedi industry to flourish in West Bengal is the availability of cheap labour. Beedi workers are poor and mostly unorganized. The main objective of this paper is to highlight the socio – economic condition and health problems of women beedi workers who are engaged in beedi rolling. The study was based on primary data and the survey was conducted in Memari – 1 block of East Bardhaman, West Bengal. Total 153 women beedi rollers living in Parijatnagar Village of Memari – I block were randomly surveyed by using questionnaire schedule. The survey revealed the fact that total 40.5% female were illiterate. They got only 147 rupees wages for rolling thousand beedies. On an average 68.5% women are suffering from back pain while 62.5% are suffering from chronic headaches*

Keywords- *Cottage industry, Labour, wage, poverty, Beedi rolling, Health.*

Introduction- The beedi industry is one of the largest employers of workers in India, after agriculture handloom and construction. Beedi manufacturing is a traditional agro – forest based industry in India, highly intensive and predominately unorganized. The industry employs unskilled labour and is located where there is a availability of cheap labour. The beedi industry is primarily an unorganized sector. Beedi industry is a part of the tobacco industry. Beedi is a poor mans cigarette. “Beedis are cheap and widely smoked in India”¹. Beedi manufacturing takes place in almost all the major states of India such as in Madhya Pradesh, Chhattisgarh, Bihar, Orissa, Assam, West Bengal, Kerala, Karnataka, Gujarat, Tamil nadu, Maharashtra, Uttar Pradesh, Rajasthan and Andhra Pradesh. The main four steps involved in the production of a beedi are (1) rewinding the thread, (2) cutting the beedi leaves, (3) rolling the beedi and (4) folding the beedi head. “Beedi rolling is one of the major informal sector activites in India.”² The term was “Informal sector” interpreted in the 19th international conference of labor statisticians, to cover an informal enterprise which is unincorporated, owned by a household, produces for a market, and does not keep a formal set of accounts. The Government estimates that there are about 4.4 million workers in this Industry. The majority are home based workers who live below poverty line. In view of increasing population, unemployment, poverty and illiteracy beedi industry appears to be an easy way of earning a wage.

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The Indian market for smoking tobacco is dominated by beedis. A bidi is a leaf rolled cigarette made of course uncured tobacco, tied with a colorful string at one end. "As it is a cheap form of tobacco consumption, it is extremely popular amongst the lower economic group. Beedi carries greater health risks as it delivers more nicotine, carbon monoxide and tar also."³ Beedi industries is an important cottage industry and provides subsidiary source of livelihood to agriculture laborers. "This industry also has a significant role to the upliftment of socio – economic conditions of the women beedi workers in India."⁴ This industry employs thousands of people most of who work under conditions which are harmful to their health. It is significant to note that majority of the workers in some places as high as 90% are women. The reason for this is, Firstly, the work is simple, secondly, the work is done generally at home and women can do it simultaneously while attending their children and also while doing other domestic household activities. Thirdly, their deft fingers are more suitable for beedi rolling work. Fourthly, women are sincere and hardworking. It also involves substantial expenditure on premises for the work and payment of wages are minimum but regularly and easily accessible.

Brief Review of Literature- Burman and Iti (July, 2018), analyze the nature and major problems of Beedi Industry. They also analyze the socio-economic condition of beedi workers engaged in beedi rolling at Murshidabad district, West Bengal. According to them "The wages provided to beedi rolling is very low as compared to minimum wages."⁵

Rupali V. Sabale et.al described the health problems of beedi workers. They analyzed the working condition and health hazards in beedi rollers residing in the urban slums at Mumbai. According to them "Around 48.08% had started beedi rolling at the age of 11 to 15 years and 42.31% were illiterate."⁶

According to Sarah Khan (31st Aug, 2020) "Poor marginalized women rolling workers face acute exploitation. These poor women workers about five million in number barely earn Rs 20 per 500 beedis and suffer various health problems including breathing difficulties, joint pain and fading finger points."⁷

According to Pallavi Puri (18th March, 2020), "Every year between 750 billion and 1 trillion beedi sticks are smoked in India by nearly 8 percent of the population, which makes beedis twice as popular as cigarettes."⁸

Madhamima Mukherjee et. al (Aug, 2014), have conducted a study on health profile of beedi workers in West Bengal. The study revealed that most of the beedi workers were women and they were economically weak without having education. According to them "Most of them were suffered from health related disorders few of them suffered from tuberculosis and lung cancer which are caused due to over exposure to the harmful tobacco dust."⁹

Objectives- The main objectives of this paper are –

1. To identify the problems of the beedi workers.
2. To analyze the socio – economic condition of the workers engaged in beedi rolling.

3. To study working condition and health hazard among beedi rollers in the Memari Block -I of East Bardhaman district.

Methodology- Descriptive Cross sectioned community based study was carried in the rural area of Memari – I block. This study is based on primary data. Total 153 beedi women workers who are engaged with beedi rolling were interviewed. Structured questionnaire schedule was used to obtain information related to their socio economic conduction, education and health status. Total 153 women workers who are engaged with beedi rolling were randomly interviewed. Around 15 – 20 minutes time was taken to interview each sample. Survey was mainly conducted in Parijatnagar village of Memari – I block under East Bardhaman district West Bengal.

Selection of the Area- The survey was conducted in Parijatnagar village which is under Hingalganj mouza of Memari – I block, East Bardhaman West Bengal. In this village more than 80% female population are engaged in beedi rolling. This is totally hindu dominated village. This village is located about 2 km west from Memari station, East Bardhaman. Parijatnagar village is surrounded by Sultanpur and Utkedanga village in the east, Maheshdemga camp area in the west Kenna village the north and Kharo village in the south. This village is under Nimo gram panchayet area.

Finding of the study- Beedi are smoked primarily by men and are rolled primarily by men and are rolled primarily by women often in their homes. According to conservative estimate more than 6 million persons are engaged in Beedi making processing and allied work Beedi workers are vulnerable segments of the country's labour force which has increased involvement of women and child labour in Beedi rolling activities. In the surveyed area all 153 women sample workers are Hindu and 95% of them are belongs to schedule caste categories while 3% are scheduled tribes and rest are under general category. (Table – 1)

Table – 1
Caste structure of sample workers

Category	No. of sample workers	% of sample workers
S.C	145	95.0
S.T	5	3.0
General	3	2.0

Source – Personal survey, 2020-21

Out of 153 sample women workers who are engaged in beedi rolling activity 22.5% workers are under the age group of 25-30 years while 24.0% are at the age group of 30-35 years. Maximum percentage (35.5%) of the sample women workers are under the age group of 35 years to 40 years. Percentage of women workers above the age group of 40 years are minor in percentage (7.4%). About 10.6 % women are younger within the age group of below of 25 years. (Table – 2)

Table -2
Age structure

Age Group	No. of Sample workers	% of sample workers
< 25	16	10.6
25 – 30	34	22.5
30 – 35	37	24.0
35 – 40	54	35.5
>40	12	7.4

Source: Personal survey, 2020 – 21

In the surveyed area 95% people are migrated people. Most of them came from Bangladesh. Educational status of surveyed women reveals the fact that out of 153 sample women 40.5% were illiterate while 23.0% women are primary educated 15.5% have up to middle class (VIII class) education only 9.5% women have up to secondary level (up to class X) education while 6.5% women passed higher secondary level. Percentage of graduate women are very minor in percentage (5.0%) (Table – 3)

Table – 3
Educational structure

Category	No. of Sample workers	% of sample workers
Illiterate	62	40.5
Primary educated	35	23.0
Up to Middle Class (VIII)	24	15.5
Secondary (up to X)	14	9.5
Higher Secondary	10	6.5
Graduation	8	5.0

Source: Personal survey, 2020 – 21

Out of 153 sample workers 31.3% are unmarried and 6.5% are widow. Total 57.2% women are married while 5% are living as a single women due to marital disturbance (Table – 4)

Table – 4
Marital status

Category	No. of sample workers	% of sample workers
Unmarried	48	31.3
Married	87	57.2
Widow	10	6.5
Single women	8	5.0

Source: Personal survey, 2020 - 21

“As per the International Labour Organization (ILO) the Indian government estimates 4.5 million beedi workers in India, majority of who are home based women workers. Another study claims that apart from poor women, more than 1.7 million children are involved in beedi rolling in the country.”¹⁰ In the surveyed area out of 153 sample women 28.5% women are rolled beedis for 10 years while 36.4% women are rolled beedis for last 15 years and so long. Daily 17.3% women are rolled beedis for last 5 years back while 10.4% women just started their job during COVID to increase family income (Table – 5)

Table – 5
Working Experience

Time Period (year)	No. of sample women	% of sample women
< 5	16	10.4
5 – 10	26	17.3
10 – 15	44	28.5
15 – 20	56	36.4
>20	11	7.4

Source – Personal survey, 2020-21

The monthly income of these sample women depends on the number of the rolled beedis. On an average at present women are getting rupees one hundred forty seven (Rs. 147/-) only for thousand beedi rolling. In the surveyed are 56.5% women rolled on an average 500 beedis per day while 29.2% women rolled on an average thousand beedis per day. Most of them are younger in age. These are 12.5% women who are suffering from acute back pain and rolled beedis occasionally. On an average at present they can rolled below 500 beedis per day. Only 7.5% women are engaged most of the time in beedi rolling and are able to rolled more than 1500 beedis in a day while 5% women rolled on an average 2000 beedis per day (Table – 6).

Table – 6
Average per day Income

Average Number of Beedi rolled	Per day average Income in Rs /-	No of working women	% of sample women
< 500	< 74	19	12.5
500 – 1000	74 – 147	70	45.8
1000 – 1500	147 – 221	45	29.2
1500 – 2000	221 – 295	11	7.5
>2000	>295	8	5.0

Source – Personal survey, 2020-21

“There are several studies on the socio-economic conditions of beedi workers and their problems in the Indian subcontinent. These studies have brought out the problems in availing the benefits of social security measures – weakly holidays, provision for annual leave, maturity leave for women workers sick leave and medical benefits. Further, they have highlighted the status of living conditions, poverty, indebtedness and sexual exploitation.”¹¹

According to trade unions, “The majority of beedi workers do not have ID cards, while the government estimates that only about 15 percent of beedi workers do not have ID cards. For families engage in beedi production, the stranded practice is to issue an ID card to only one number of the family even when other members of the family also roll beedis. On an average in the surveyed area out of 153 sample workers 22.8% women workers have ID cards and got facilities like scholarship for their children, loan for building construction and relaxation in health related treatment cost (Table – 7).

Table – 7
ID card Holders

Whether ID Card Holder	No. of sample women	% of sample women
Yes	35	22.8
No	118	77.2

Source – Personal survey, 2020-21

To make beedis, tendu leaf is first soaked in water and then dried. This is followed by the cutting of leaf, filling it with tobacco dust and rolling. This activity is related to a large number of health problems, such as chest pain, breathing difficulty, leg and back pain, tuberculosis, asthmas, anemia etc. “Beedi rollers are exposed to tobacco dust and hazardous chemicals. They experience exacerbation of tuberculosis, asthma, anemia, giddiness, postural and eye problems and gynecological difficulties.”¹³ For an experienced beedi maker, it takes only 320 seconds to complete a beedi. That means it may approximately take an hour to prepare 120 beedis, So on an average women spend 5 to 6 hours of a day for rolling 500 – 600 beedis. The nature of work of beedi rollers involves prolonged sitting with the trunk bent forward and the exposed to unburned tobacco dust through coetaneous and pharyngeal route and it is extremely harmful to the body since it is carcinogenic in nature and can cause cancer during long exposure. Mainly two factors that cause health hazards are first, the raw materials especially tobacco and secondly, the nature of work, working conditions and the workplace constant exposure to tobacco dust results in respiratory irritation. Tuberculosis and bronchial asthma among beedi rollers are mainly due to the dust they inhale. Sitting for long hours causes back and neck aches, joint pain as well as arthritis and gynecological problems. “It is observed that the incidence of back pain is the highest among the girl children who roll beedis. This is because beedi rolling involves long hours of sitting in a cramped posture in consigned spaces. Leading to immense strain on the vertebral column.”¹⁴

The table 8 revealed that in the surveyed area out of 153 sample beedi roller women 3.5% are suffering from tuberculosis, 15.5% are suffering from Oral disease while 12.5% are suffering from ulcers. Only 68.5% of the respondents replied that they did not suffer from any disease. A majority (55.5%) of the respondents replied that they suffer from respiratory disorders. A majority (58.0%) of respondents had callosity on their hands. Majority of the respondent (54.8%) also said that they experienced frequent numbness in their fingers while the rest 45.2% did not. Most of the respondents (57.5%) suffered from piles or pain in the urinary teach while 10.5% sample women workers have high incidence of pregnancy problems. On an average 46.5% of the respondents replied that they are suffering from irregular menstruation and remaining 53.5% had normal menstruation. In the surveyed area on an average 55.8% are suffering from high blood pressure 30.2% are suffering from low blood pressure compared to only 14% having normal blood pressure. A vast majority (62.5%) suffered from chronic headaches and rest (37.5%) did not get chromic headaches. (Table – 8)

Table – 8
Health Profile of the women Beedi sample workers

Variables	Types	No. of sample workers	% of women workers
Suffer from disease	Tuberculosis	5	3.5
	Oral disease	24	15.5
	Ulcer's	19	12.5
	None	105	68.5
Suffer from respiratory disorders	Yes	85	55.5
	No	68	44.5
Pregnancy Problem	Yes	16	10.5
	No	137	89.5
Callosities	Yes	89	58.0
	No	64	42.0
Numbness in Finger	Yes	84	54.8
	No	69	45.2
Fatigue in arms	Yes	88	57.5
	No	65	42.5
Piles or pain in Urinary tract	Yes	32	20.8
	No	121	79.2
Blood pressure	High	85	55.8
	Low	46	30.2
	Normal	22	14.0
Suffer from chronic head aches	Yes	96	62.5
	No	57	37.5
Regular cough	Yes	91	59.8
	No	62	40.2
Suffering from back pain	Yes	105	68.5
	No	48	31.5
Suffering from irregular menstruation	Yes	71	46.5
	No	82	53.5

Source – Personal survey, 2020-21

Suggestions- Following are some of the suggestions to improve the living condition of the beedi women workers in the surveyed area.

1. The wages provided to beedi rollers is very low as compared to minimum wages (147/- for 1000 beedis). They spend their entire day in rolling the beedi which is very time consuming and tiring work, for which the payment made is very low, this should be monitored by the state government.
2. The beedi rollers are in the clutches of the contractors. These contractors exploit the workers, so the work of the contractors should be redefined and should be made responsible for the protection of the workers. Contractors should be identified by the employer and regularized so that irregularities in payments made by the contractors can be controlled.
3. Women beedi rollers should get all the maternity benefits and allowances.
4. The state government should take appropriate measures to curb child labour which is predominant in this area as they help their mother in free time.

5. The employer must be identified and employer and employee relationship should be established.
6. Each and every beedi women worker should be identified in a family and provided separate beedi ID card which will help them to avail facilities in a better manner. Usually only one single person in the family holds ID card and rest of the members do not have ID cards.
7. The beedi rollers should have regular health check up in nearby government hospitals.
8. Beedi rollers themselves should be aware of their rights, that is, minimum ways the facilities they can avail from the central or the state government, what all medical facilities they are eligible for, what criteria they are supported to fulfill to get identify card.
9. The younger generation should be provided education, which will in turn will give them confidence in getting into some other profession and explore new opportunities. The education should be completed at least till class XII.

Conclusion- The present study clearly described that most of the beedi women workers were economically weak and many of them had no education or lack of education. The beedi workers suffered from a number of health related disorders Back pain, irregular menstruation Fatigue in arms numbness in finger, chronic headaches, regular cough, pain in urinary tracts were common problem faced by a vast majority of beedi workers.

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The Protection of Children from Sexual Offences Act, 2012 – An Overview

• Shilpa Seth

Abstract- *This paper has made an attempt to highlight and assess the substantive and procedural aspects of the law protecting children against sexual abuse especially the light of the recent enactment of the Protection of Children from Sexual Offence Act, 2012. But the mere fact that a legislation has been made is not going to be sufficient to protect the soul of our future generations from scars of sexual abuse. The myth that pedophiles and child abusers are predatory strangers needs to be dispensed and this can only happen by taking collective steps, out of which the quintessential one is to break the silence.*

Keywords- *Children, Sexual abuse, Sexual Offence, Civilized society*

Children are the future of our country and on their tiny shoulders rest the progress and development of a nation. Specially, in a civilized society prime importance must be given towards the welfare of children because the welfare of the entire community, its growth and development depend on the health and well being of its children. In order to ensure that children are become decent and useful member of the society they must be helped to grow into maturity. They need proper nourishment, protection and care like a tender plant. Just as a tender plant cannot grow into a tree if it is not properly nourished similarly children too cannot grow.

Therefore, keeping in a mind the tender age of children they must be provided special protection against the various offences that are committed against them. One such offence is sexual abuse of children. In our society sexual abuse of children is slowly gaining momentum and has been a existence in our society for decades. It is a harsh reality that this social evil though it exists in our society but it is difficult for the majority of us to even accept that this evil exists mainly because of the guilt and shame associated with it. Sexual abuse of children, undoubtedly, is the violation of the basic human right of children. The innocent victims of sexual abuse carry these scars throughout their lives. One of the major problems that arise in cases of child sexual abuses is that since the children are not able to fully understand the different dimensions of child abuse and they fear to talk about their experiences. As a result majority of the time cases of child sexual abuse never come in light. In even parents refuse to report the case fearing that what the society will think. This fear of society is the main cause for many of the child abuse cases unreported and thereby encourages the abuser.

Meaning of Sexual Abuse of Child- Child sexual abuse is any kind of physical or mental violation of a child with sexual intent, usually by a person who is in a position of trust or power vis-a-vis the child. It is any sexual

behavior directed towards a person under the age of 16 years, without informed consent. Any child below the age of consent may be deemed to have been sexually abused when a sexually mature person has by design or by regime of the usual social or specific responsibilities in respect of the child engaged permitted engagement of the child in activity of a sexual nature, which is indented lead to the sexual gratification of the abusive person. Child sexual abuse includes adult exposing his/her genitals to a child or persuading a child to do so, an adult touching a child's genitals or making the child touch the adult's genitals, an adult involving a child pornography, an adult intercourse with a child or any other sexual gesture or suggestion made by an adult towards a child.

According to World Health Organization, child sexual abuse is the involvement of a child in a sexual activity that he or she does not fully comprehend is unable to give informed consent to, or that violates the laws or social taboos of society.

SAKSHI, an Indian organization, working on women and child rights, has defined child sexual abuse as "the physical or mental violation of a child with sexual intent, usually by an older person, who is in some position of trust and/or power vis-the child".

Child Sexual abusers- Children are generally sexually abused by adults. Child abusers do not have a distinct profile. The offenders generally fall into two categories i.e. Pedophiles or fixated persons and Regressed Offenders. Pedophiles are dangerously good planners, manipulative and often very clever persons. On the other hand regressed offenders are more common and come mostly from within the family. The regressed offenders usually abuse children to relieve the stress that they are unable to cope up with. Hence their victims are usually from within the family who are accessible and over whom they can exert pressure. Apart from these two categories in some Cases even a family friend, teacher or the nice neighbor have turned out to be child sexual abusers. Normally in these cases, the abuser is the one whom the child trusts. As a result the child is shocked and because of shame is not able to talk about it with anyone.

Apart from the above mentioned children belonging to poor families, children who are abused and neglected by parents and children of prostitutes have no other but to live in the streets. There, they are sexually abused and the abusers me be any member of the public which may include even the police. Some children are sold by their parents to the managers of brothels. Such children end up being sexually abused everyday of their lives by those who visit those brothels.

Children those who work as domestic servant may be sexually abused by their masters. Child care institutions are established in order to take care and protect children in need. However, there have been instance of child sexual abuse in such institutions as well. In such cases the abusers may be the management or staff or any inmate such institutions. Since children staying in these institutions have very little cot with the outside world therefore instances of such abuse never come to light.

International Parameter–The U.N, Convention on the Rights of the Child, 1989 has cast important responsibilities on state to protect the child from all forms of sexual abuse (Article 1).

Accordingly, under Article 34 of this convention "each state should take all appropriate national, bi-lateral and multi-lateral measures to prevent the inducement or coercion of child to engage in any unlawful sexual activity, the exploitative use of children in prostitution or other unlawful sexual practices and the exploitative use of children in pornographic performances and materials."

Under Article 35 of this convention, "the state is also required to take appropriate national, bilateral and multi-lateral measures to prevent the abduction or the sale of or traffic in children any purpose in any forms."

It may be mentioned here that India ratified the convention on the Rights of the Child on 11 December, 1992; therefore, India is obliged to ensure that the rights of the child against sexual exploitation, enshrined in the convention, are protected in our country.

The Indian Scenario- The Constitution of India incorporates some of the rights included in the Convention on the Rights of the Child as 'Fundamental Rights' and 'Directive Principles of State Policy "there are several assurances, meant specifically for children. Right to free and compulsory elementary education for all children in the 6-14 year age group", right to be protected from any hazardous employment till the age of 14 years' right to be protected from being abused and forced by economic necessity to enter occupations unsuited to their age or strength right to equal opportunities and facilities for a healthy and dignified upbringing' and compulsory education and care in their preliminary years.

The penal enactments by the legislature were however way too ill equipped to have incorporated the international mandates. The Indian Penal Code, 1860, India's criminal statute does not recognize pedophilia in any of its provisions. Due to Code some forthcoming conduct regarding pedophilic crimes and child sex abuse, the prosecutors are forced to rely upon the generalized terms that may not be adequate enough to furnish justice to such crimes. Generally, to criminalize sexual offenders this prototype a wide interpretation of the provisions were put in force that "criminalized sexual offences against women. Other forms of sexual crimes such as exhibitionism, the 'wrong' touch, penetration in any of the three orifices and insertion any foreign object did not find any place in the Code. Outraging the modesty of women can also be contested in the court of law given that modesty of women is subject to judicial interpretation.

The Protection of Children from Sexual Offences Act, 2012- The Protection of Children from Sexual Offences Act, 2012, has been passed by the Lok Sabha on May 22, 2012. The Protection of Children from Sexual Offences Act, 2012 has been drafted to strengthen the legal provisions for the protection of children from sexual abuse and exploitation. For the first time, a special law has been passed to address the issue of sexual offences against children. The Act is, in itself, a remarkable positive step in recognizing not only the issues with regard to child sexual abuse but also

takes intricate steps to tackle this enraging social issue.

While acknowledging the disadvantage that our adversarial legal holds, especially with the recognition of the sensitivity of the victim, the Act provides for a special court so as to do away the verbal battle and balancing of evidence which happens in a normal court of law, This formation of special courts is a relief, keeping in mind the nature of trial and examination procedure adopted in a court of law and this attains paramount importance since often the only witness available in such a case is the abused child himself. Credit needs to be given to this Act for understanding the sensitivity of the victim and the nature of the offence committed against him or her and thus has provided for the establishment of special courts for trial of offences under the Act, keeping the best interest of the child at every stage of the judicial process.

The Act considers every person below the age of 18 years as a child. This interpretation is a victim oriented step and does much to do away with the debate over the clash of age of consent of the child in various legislations. Keeping in mind, the age limit of marriage for girls is 18 the Act is in consonance with the institution of marriage which prima facie encompasses in itself sexual intercourse and the requisite age of consent. Furthermore, an offence is treated as aggravated when committed by a person in a position of trust authority of child, such as a member of Security force, police officer public servant etc.

The Act provides that penetrative sexual assault is punishable with imprisonment for not than seven years which may extend to imprisonment for life and fine. Aggravated penetrative sexual assault on the other hand is punishable for at least ten year which may extend to imprisonment for life sexual assault punishable for a period not less than three years which may extend to five years sexual harassment of a child is punishable for three years with a fine and use of children for pornographic purpose and voyeurism is punishable with an imprisonment of five years and in case of conviction seven years along with a fine.

Child friendly procedures are incorporated in this Act, they are-

- Recording the statement of the child at the residence of the child or at the place of his choice, preferably by a women police officer not below the rank of the sub- inspector. Evidence has to be recorded within 30 days
- No child to be detained in the police station in the night for any reason.
- Police officer to not be in uniform while recording the statement of the child
- The statement of the child to be recorded as spoken by the child.
- Assistance of an interpreter or translator or an expert as per the need of the child.
- Assistance of special educator or any person familiar with the manner of communication of the child in case child is disabled.
- In case the victim is a girl child, the medical examination shall be conducted by a woman doctor

- Frequent breaks for the child during trial.
- Child not to be called repeatedly to testify.
- No aggressive questioning or character assassination the child.

Shortcomings of the Act-The Act in its spirit is a misnomer since it does talk about protecting the child but only once the offence is committed, thus omitting any kind of preventive steps. The theory of punishment being a deterrent is extremely evident here but how effective will this deterrent be is open to much speculation, while keeping in mind the course of it, the Act also penalizes any sexual activity, even a consensual one, with children under 18 or between minors.

The provisions in the Act relating to the age do not reflect upon the stark realities of postmodern society due to conservatism and archaic conceptions. The fact cannot be denied that youth indulge in sexual acts. It would be unjust to penalize two consenting minors having consensual intercourse because the Act is silent. This lacuna in the Act bears a hypocritical outlook to a social concern which needs sensitivity and care to prevent the misuse of such acts in the future and to give justice to true victims.

The need of the present day society is that the law should be such that it endorses in itself a flexible standard for determining the age of consent of minors to avoid legal anomalies especially in case of minors being punished at par with an adult." In this regard, one may take cognizance of legal systems which have addressed the issue more comprehensively like the law in Switzerland, where though the legal age of consent has been fixed at sixteen years," an exception has been carved out for cases where the age difference between the involved parties is three years or less.

Similarly, in Israel, while sexual intercourse with a child below the age of fourteen years is considered to be statutory rape, irrespective of the consent, however if the child is between fourteen and sixteen years and the age gap between the two individuals is less than two years, consensual sexual intercourse is legal." The relativity of these laws rests in the fact that they endeavor to protect the child from sexual abuse whilst carving a reasonable exception in the case of minors engaging in intercourse consensually.

A further sensitization of the legislation is needed with regard to the initial addressing of the reporting of the incidents of abuse. The law has a victim-oriented, sensitized approach when it comes to the child but fails to encompass in itself persons and institutions which specialize in terms of child welfare and abuse cases. This aspect can be identified in the United States Federal Legislation" which calls upon the law enforcement agencies and the social service bodies to work together during investigation and trial for protecting and dealing with both the psychological and physiological trauma of a child sexually abused and this Acts as a buffer system against re-dramatization during the process.

The biggest lacuna in the legislation can be seen in Chapter V of the Act which describes the procedure for reporting of cases. The ambit of this part of the legislation is too wide and thus invites misuse. The term 'any person' is used to indicate anyone who has reason to believe that an offence under this Act is likely to be committed or knows that such an offence has been committed any time in the past is obliged to inform the special juvenile police or the local police. Failure to report is considered a criminal offence punishable by imprisonment. Furthermore, the legislation provides for no punishment for a child who makes false accusations or provides false information. This provision is child friendly, at the same time there are no provisions in the Act to check whether the child has made a false allegation. The legislation does not provide for any provision relating to the protection of the person other than a child, who reports the incident of abuse. The legislation also has no protection for whistle blowers.

For better implementation of the Act following Amendments made in 2019:-

- The amendment increases the minimum punishment from **seven years to ten years**. It further adds that if a person commits penetrative sexual assault on a child below the age of 16 years, he will be punishable with imprisonment between 20 years to life, with a fine.
- The amendment adds two more grounds to the definition of **aggravated penetrative sexual assault**. These include: (i) assault resulting in death of child, and (ii) assault committed during a natural calamity, or in any similar situations of violence. Currently, the punishment for aggravated penetrative sexual assault is imprisonment between 10 years to life, and a fine. It also **increases the minimum punishment from ten years to 20 years**, and the maximum punishment to death penalty.
- The amendment adds two more offences to the definition of **aggravated sexual assault**. These include: (i) assault committed during a natural calamity, and (ii) administering or helping in administering any hormone or any chemical substance, to a child for the purpose of attaining early sexual maturity.
- It defines child pornography as any visual depiction of sexually explicit conduct involving a child including photograph, video, digital or computer-generated image indistinguishable from an actual child and adds two other **offences for storage of pornographic material involving children**. These include: (i) failing to destroy, or delete, or report pornographic material involving a child, and (ii) transmitting, displaying, distributing such material except for the purpose of reporting it. It also enhances the punishments for such offences.

The Protection of Children from Sexual Offences Rules, March 2020-

Following are the heads under which the Pocso Rules, 2020 have been laid down:

- Awareness generation and capacity building

- Procedure regarding care and protection of child
- Interpreters, translators, special educators, experts and support persons
- Medical aid and care
- Legal aid and assistance
- Special relief
- Compensation
- Procedure for imposition of fine and payment thereof
- Reporting of pornographic material involving a child
- Monitoring of implementation of the Act

Conclusion & Suggestions- This paper has made an attempt to highlight and assess the substantive and procedural aspects of the law protecting children against sexual abuse especially the light of the recent enactment of the Protection of Children from Sexual Offence Act, 2012. But the mere fact that a legislation has been made is not going to be sufficient to protect the soul of our future generations from scars of sexual abuse. The myth that pedophiles and child abusers are predatory strangers needs to be dispensed and this can only happen by taking collective steps, out of which the quintessential one is to break the silence.

These are some suggestions for better implementation-

1. Most of child abuses take place in a relationship as it is much safer and easier for a person to take advantage of the child's weakness and helpless so parents should be aware about this.
2. It is responsibility of our education system to provide the basic knowledge to children about how to identify unsafe touches and situations.
3. There are also some studies say that child sexual abuse can have a worst impact on the mental health of the child and if it is not healed at the earliest stage it would even affect at adulthood. To prevent this one need to undergo therapy and counseling so create support system for victims.
4. There is an urgent need to train the medical staff, teachers, judicial staff advocates and also sensitizing the public through NGO, Television broadcasting.
5. Educate employees to listen the children and ensure children's safety at work place. Child help No. help line should be publicized.
6. There is urge need in amendment in Sec. 7 of the Act according this provision physical contact and skin to skin touch is necessary for sexual assault so as to achieve the goal of this Act this section must be amend.
7. This Act has strong provision but weak implementation so vigilance committee should be constitute for proper monitoring and implementation of the Act.

Reference-

- The Protection of Children from Sexual Offences Act, 2012

Medicine Advertisement in Colonial Oriya Newspapers

•Jayanti Sahoo

Abstract- *Advertisement is a picture, caption or some kind of writing that are put as a notice or announcement in a public medium promoting a product, service or event. However, the importance of advertisement has been experienced not only in India but also in Orissa during colonial time in order to make various products like medicines which were widely marketable and one of the most significant products to be advertised through colonial Oriya newspapers to reduce the untimely death and popularizing both Western and Indigenous systems of medicines. The newspapers appeared as a new mode of mass communication to provide a space for advertisement of medicine as it reached a large number of readers in late nineteenth-century Orissa.*

Keywords- *Medicine, Advertisement, Orissa, Western, Indigenous, Public Space*

Introduction- The concept of advertisement came with the idea of capitalism and consumerism. A consumer can be created through the advertisement by explaining the advantage of a product in a caption or in the form of picture. Here, the discussion of advertisement revolves around printed culture, especially in newspapers and periodicals. The printed newspaper became a space on which one can advertise a commodity and could reach the larger mass for marketing and awareness. As disease and medicine are interlinked, our discussion preferably on the advertisement of various medicines; how they were advertised on the space of newspaper. Now, there will be a prolonged discussion on the advertisement of medicine in newspapers and periodicals.

Idea of Advertisement in Newspapers- The first instance of advertisement comes from the newspaper *Utkal Dipika*, a largely circulated in the last quarter of nineteenth-century Orissa. Generally, the advertisement used to come in the form of column, article, or a picture of a product with some kind of caption. However, the newspaper in its regular form came to Orissa in the post-1866 period.

How do we mark the shift from the traditional advertisement to modern advertisement? The modern way of advertising a product can be found in newspapers. But, how could we trace the idea of traditional way of advertising any product or commodity in order to create consumers for it. The idea of consumerism was not there in pre-advertisement era in Orissa. So, people were not much exposed to the new products unlike industrial Europe. In this context, Madhuri Sharma's article on advertisement gives us some kind of idea on European advertisement and its rupture from the pre-industrial era. She marks the rupture in the mode of advertisement in Europe in the following manner-

Although advertising existed in pre-colonial societies in the shape of announcements and proclamations, it required its present form and dimension only with the development of modern machine-based mass production. Advertising stepped into create mass demand and to compete for it. Thus, by the mid-nineteenth century the 'industrial revolution' had altered the relationship between advertisers and consumers. The growth of the modern newspaper marked another watershed for advertising, enabling the manufacturer to place his goods before the eyes of thousands. Early advertisements were very much like announcements, giving factual information such as the availability of a particular item and in most cases indicating its price and the address of the retailer. Later on, sketches along with descriptive details and photographs were also included in the advertisements.

Although India did not experience an industrial revolution but it had seen advertisement with the flow of English industrial products into it. And, the coming of newspaper had given a space for the advertisement. Like English, the Indians also got an opportunity to market their product. Similarly, the colonial Orissa saw the influx of western products and use of newspaper for its marketing. The indigenous products found newspaper as a potential vehicle to reach to the people in the remotest areas. Thus, an idea of advertisement through newspaper came to exist in the post-1866 Orissa.

Western Medicine in Colonial Orissa- As this study found that the entire medicines, those advertised in newspapers, were broadly categorized into "Western" and "indigenous" medicines. The advertisement came for the indigenous medicines in most of the case, wherein, western medicines could not get popularity due to some reasons. Generally, the native people had an imagination of foreignness towards western medicine. People scared to go hospital for the reason that they would lose their caste.

From an advertisement in *Utkal Dipika*, it is pretty clear that people were frightened when they were asked to go for vaccination which was a tool of Western medicine. The translated form of that advertisement has been given here:

Small-pox shadowed over the districts of Cuttack and Puri. The District Magistrate of Cuttack has ordered to take small-pox affected person anywhere in the town to Chauliaganj hospital. The doctor has requested to public in order to take vaccination of English form. The English vaccination is not recognized by public of this region. Nevertheless, we believe that the rich person of our country should take this vaccination for which they will see the wonderful result of it.

The public perception had changed towards English/Western medicine through advertisement. Many such instances are available to prove that the Western medicines were getting into Oriya society partly by advertisement and also through dispensary/hospital. The Western medicine had an eye on extracting profit for which they wanted to penetrate the rural region of Orissa. A piece of writing, *Bilati Oushadha Bikraya* (Selling of English/Western Medicine) talked about the selling of the Western medicine in rural Orissa.

The selling of western medicine permeated into interiority of Orissa in order to minimize the government expenditure on hospitals. According to this article, Lord Mao, the Governor General of India, asked the Bengal government to give a list of all the hospital under it. He ordered to put hospitals in two categories: those hospitals could buy English medicine and those hospitals that could not do so. The Government of Bengal explained to Governor General of India about the precarious condition of hospitals in Bengal. In a large extent, the hospitals in Bengal were run by the contribution and donation by the native people whereas the government fund was spent on doctors' salaries and free distribution of medicine among common people. However, the Bengal government sent a proposal to Government of India to sell medicine to common people in original price as it was suggested by the Health Commissioner. This proposal was accepted by Government of India to sell English medicine in the following method-

Though, the government scared of the profit-making nature of low-salaried native officers who will appear as medicine seller but, it will constricted the commercial purpose of the English medicine as well as pull down the medicine business. Still, it is necessary to sell medicine to the people of Bengal in order to prevent lethal and contagious diseases in the region.

There are many such examples which justify the making of ground to bring up the market for English medicine in the colonial society. Even Dr. Charles went a step forward to publish an article, *Daktar Charles O Desiya Tika* (Dr. Charles and Indigenous Vaccine) to compare the English and native vaccines for small-pox, a major disease in the second half of the nineteenth-century India. He has clearly glorified the English vaccine and discarded the indigenous vaccine for its destructive nature. His opinion an indigenous vaccine is summaries below-

The indigenous vaccine may causes death to the small-pox affected person at the time of vaccination. This vaccine creates epidemic for which the local people. The rules for vaccination are disgusting, and it creates a stressful atmosphere for the victim and people around him/her. The vaccinated person may get small-pox in future and it causes to death. Apart from this, the vaccinated person is deceived by believing that they are not affected by small-pox as they do not have fever or abscess.

His opinion on English vaccine is quite positive which is visible in his article. Here it is cited from his description on English vaccine in the following manner-

English vaccine does not give much pain to the vaccinated person. Like indigenous vaccine, it cures the small-pox with one vaccination. The interesting part of this vaccine is that the vaccinated person never dies if the small-pox returns in future. The English vaccine freezes the contagious nature of small-pox whereas indigenous vaccine never does that.

Another article, *Ingrazi Oushadha Bikraya* (Selling of English Medicines) in *Utkal Dipika*, there was a description, why Western medicine could be sold in Bengal but not in Orissa. The advertisement of English medicine in Bengal was familiarizing among the common people who bought in plenty. But, many Oriyas did not have any idea of these medicines

and its usage. They were not informed the nature of the medicine and the place where it was available. The article suggested the doctor to advertise about the medicine in courts, police stations and in the weekly market. Moreover, the example of Quinine as an importance medicine for fever was not familiar in the district of Puri and Cuttack. Then how do we expect the selling of this medicine in the other areas of Orissa. This advertisement was a step to popularize the Western medicine in colonial Orissa.

The colonial government had taken interest to provide Western vaccine in all corners of Orissa. An article, Ingrazi tika (English Vaccine) focused how the English vaccine was only familiar among native Christians and newly English educated Oriyas. Dr. Pears argued that the Oriyas did not dislike English vaccine as it was happened before. A mechanism was devised to implement the vaccine firstly in Cuttack and then in other regions of Orissa. Some salaried officials were appointed to implement the vaccination policy of colonial government in Cuttack. The plan of vaccination was described in the following manner-

The vaccine-injectors will be divided into five groups. Each group will be headed by a head vaccine-injector. Every day, the groups will choose their region in the district and vaccinated each village. For all these activities, they will take help from local magistrate along with police and Zamindar. There will be separate attention on people who should not be troubled. Those who provide their boys to take vaccine will be given some prizes.

Thus, there was a constant effort by the colonial government to push forward the English vaccine to introduce in Orissa. the above citation indicates that the colonial official left no stone unturned to spread their medicine among common people. A kind of interest created among Oriyas to demand for English medicine. There strategy was to create a market for the English medicine for which we see many advertisements in the newspaper for it.

Advertisement of Medicines in Newspapers- The first instance of medicine advertisement comes from the newspaper, *Utkal Dipika*. In an article, the medicine for the diarrhea has been explained in the following manner:

A doctor from Italy, Mr. Rubini, has discovered an easy way for the treatment of diarrhea patient. A diarrhea infected person should be covered with a blanket. He should be given to eat sweet potato mixing with four drops of camphor's tincture for every five minutes. The intensity of the medicine can be increased according to the increase of the disease. Many lives have been saved through this procedure. This medicine cured all in most of the cases. This medicine is available in Calcutta with a reasonable price of one rupee for a bottle. These days, diarrhea has been developing alarmingly in this region (Orissa) for which many died due to it. All should keep this simple medicine.

The advertisement of medicine did not restrict itself to the most common diseases like small-pox, diarrhea, cholera, fever, and other contagious diseases. It was other health problems addressed by the indigenous especially the Ayurvedic medicine. In an advertisement on 25th November, 1899 in *Utkal Dipika*, an Ayurvedic medicine called "Pramehasudha" was an incredible medicine for Gonorrhea. The

advertisement said the place (Ayurvedic Oushadhalaya) of availability and the price for the medicine i.e. two rupees per bottle and extra charges if someone could want it through post.

In the same page, another advertisement is found on indigenous medicine known as Amrutadikosha or Desi Salsa. The advertisement of this medicine says that it is tested in many cases for which it is better than the Bilati Salsa (English salsa). For attracting customers it has given a picture of natural ingredients. This medicine has been projected as the constituent of many blood-purifying plants and creeps. It has vitamins from many plants and creeps which would keep the person active, and increase the hungry. It immunizes the body and gives protection from various diseases.

It is quite interesting that *Utkal Dipika* had fixed the price for the advertisement. In the page of advertisement, it has given price for one line, half paragraph, and full paragraph. The half paragraph would cost two rupees whereas the full paragraph would cost three rupees. A request had been put to get money in advance and it cost more in second and third time as it continued. So, it became a source of income for the owner of newspaper who earned a fair amount of money due to advertisement even in case of the medicine advertisement.

The indigenous medicines are quite visible in the advertisement page of the newspaper, *Utkal Dipika*. Along with indigenous medicine, the homoeopathic and allopathic medicines are also noticeable. The advertisement says that the medicines are imported from America. The place of its availability and its prices are two major particulars given in this advertisement. The advertisement of Homoeopathic medicine in the same advertisement page proves the popularity of western medicine.

Now we will observe the advertisement page of *Utkal Dipika* which is consisted of many medicine advertisements. For the clear understanding, the picture of the advertisement page has been given below-

(An advertisement page of *Utkal Dipika* on 24th November, 1899)



Though, the medicines were placed in the advertisement page of *Utkal Dipika* but, the ayurvedic and allopathic medicine stores were came to lime light along with that advertisement. The three medical shops are found

in the advertisement page on 19th September, 1885 in *Utkal Dipika*. They are: “Orissa Central Medical Hall,” “Utkal Ayurvediya Oushadhalay,” and “Chakravarti and Co (Chemists and Druggists).” All of them situated in Cuttack. The “Orissa Central Medical Hall” and “Chakravarti and Co (Chemists and Druggists)” were in Balubazar Cuttack whereas the “Utkal Ayurvediya Oushadhalay” was in Dargha Bazar. Thus it was not only the medicines of various kind but the medical shops that were brought to the notice of public.

Chakravarti and Co (Chemists and Druggists) was a finest example of the presence of Western medicine in orissa. This medical shop was completely commercial in nature. The idea on selling of Western medicine became more concrete when someone read the advertisement:

Beg to announce that they have opened a Dispensary in Balubazar, Cuttack, for the convenience of the general public. they have just received an ample assortment of fresh and good european medicines and have arranged to meet orders for Kabirajee medicines also. Orders from Mofussil will be promptly executed, and prescriptions carefully dispensed.

The “Orissa Central Medical Hall” was also selling all kinds of English medicines which is visible in the following advertisement page of *Utkal Dipika*.

(An advertisement page of *Utkal Dipika* on 19th September, 1885)

There was a other advertisement based on various medicines in Utkal Dipika suggested that different types of ayurvedic medicines were available in a medicine store named as 'Sri Jagannath Mishra Medicine

Store' in Ajmakhan bazar. The name of medicines and their price were fixed. These were given below:

- Bang raja pill-----4 pills with 1 rupee
- Srungarabhra pill---6 pills with 1 rupee
- Puspasaka pill-----4 pills with 1 rupee
- Sannipatabhairavi---5 pills with 1 rupee
- Anandabhairavi----5 pills with 1 rupee
- Basantakusumari pill---1 pill with one rupee
- Narayana taila-----1 bottle with 16 rupees
- Guluchyadi taila---1 bottle with 10 rupees
- Kubjiprasarini taila—1 bottle with 10 rupees
- Ashoka di ghruta---1 bottle with 12 rupees

Another advertisement of *Balasore Sambad Bahika* has given about the disease of back pain. There was a medicine known as 'Influyanjar' for back pain, if the person adopted this medicine, then he has cured from this disease.

Indigenous Medicines in the Public Space- Indian entrepreneurs adopted the same communication techniques and marketing strategies. They worked through the codes of local culture and also assimilated the concept of the 'Universal Panacea'. Anil Kumar refers to P. C. Roy's problems in selling his ayurvedic preparation by contrast to the products produced by Bengal chemical works. As he puts it: P. C. Roy himself hawked them in the streets of Calcutta carrying in his folio sample phials of the syrup of vasak and ajowan water. *Kaviraj Kalipadi De ka asscharya malham jo 101 bimariyan mein fayada pahunchta hai-aawaj lagate huai bagal mein tin ka dibba liye bangali babu tahalte the aankho mein chasma pahne aur haath mein sirfek chasma liye-'ek chasma' kee aawaj dete huai bare miyan kuchh logon ki aanke padhte nazar aate the* (An amazing ointment of Kaviraj Kalipadi De which helpstackle 101 types of ointments, sings a Bengali Babu, who roams on the streets. Another elderly Muslim with spectacles, who carried one spectacle in his hand and who tried to read the eyes of people shouts occasionally, "one spectacle".)

In order to prove the authenticity of their product manufactures used phrases such as "*lagatar 75 vershon se iske seven se lakhan aadmi acche bane hain*" (This medicine has been in use for the past 75 years and has benefited lakhs of people). By associating their medicines with a glorious past and using phrases that indicated how they had been tested over time.

Conclusion- Advertisements represented an advanced strategy and became a necessity because of the decline of the old patronage system in colonial India. The importance of vernacular newspapers and journals to advertise western medical products hardly needs to be stressed as they made it possible to reach a wide audience. As it discussed in the above, these advertisements were mainly concerned with the health issues of the upper classes of Indian Society. There were various advertisements about cholera, fever, stomach disease and other contagious that affected large sections of the population in colonial Orissa.

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A Study of the Consumers' Brand Awareness of Herbal Personal Care Products with reference to City of Mumbai

• Rita Khatri

•• Simran Kalyani

Abstract- *The value of Indian personal care and beauty industry was valued of Rs. 54, 550 Crore in 2020. The estimated growth CAGR rate is 12% during the period between 2021-2026 (expertmarketresearch.com). Personal care products are consisting of Hair care, Skin care, Oral care and Cosmetics. Personal care industry is the key component of fast-moving consumer goods industry in India which itself is on high growth ride. In recent years, there has been shift in consumers' preferences to herbal personal care products. Consumers are becoming aware about the effects of harmful chemicals used in synthetic products in long run. There are the various herbal brands in Indian market since years which are gaining good attention now. New ventures and brands are introduced in herbal personal care products market. In this research paper, research has tried to find out the consumers' awareness on different herbal personal care products brands available in Indian market. The study is done on Mumbai City with sample size of around 90 consumers.*

Keywords- *Herbal Personal care products, Synthetic products, Harmful chemicals etc.*

Introduction- Fast moving consumer good (FMCG) which is the key sector of India has three main sub-sectors – food and beverages occupying almost 19 per cent of the sector, healthcare accounting for 31 per cent and household and personal care occupying the remaining part of 50% (ibef. org) The FMCG is the fourth largest sector of Indian economy. Changing lifestyle, increasing of standard of living, technological advancement, digital payment and easily accessibility of products and services are the key reasons of growth of this sector.

The FMCG sector was valued in 2011 at US\$ 31.6 billion and in 2017- 2018 at US\$ 52.75 billion. The sector is further expected to reach US\$ 220 billion by 2025. This sector is witnessing the high growth rate every year. The revenue in the Cosmetics and Personal care products market was estimated at US\$14,443m in 2018.

The personal-care products industry includes skin care, hair care, oral care and cosmetics. It manufactures and sells like cosmetics, toothpastes, sun screen, razors, shaving cream, deodorant, soaps and other products for bathing, hair care products, skin care products, nail and cuticle care products, and many more products.

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In recent years we can see shift of consumers towards more natural, herbal and organic products when it comes to skin care, hair care, cosmetics and food. In 2016 when Patanjali launched the herbal personal care products in The Indian market that turned to be out the real game changer for Indian personal care product market.

Use of various of herbs for beauty, skin and hair care, food is rooted in our Indian culture. Consumers are becoming aware about the harmful chemicals used in preparation of non-herbal personal care products. Rising income level, social media use, e-commerce is contributing factors to increase of herbal personal care products sales.

Review of Literature

Banu Rekha M., Gokila K. (2015)- The researcher in paper titled “A Study on Consumer awareness, attitude and preference towards herbal cosmetic products with special reference to Coimbatore city” has tried to find the consumer awareness on herbal cosmetics. Factors influencing on herbal products buy has too been studied. The survey is done 50 consumers of Coimbatore city. Income level is the key factor affecting on spending of herbal cosmetics. As herbal products are looked up as natural, safe and chemical free products hence quality is another key factor which considered while buying the herbal products. Another key finding was that use of herbal products is need of time.

Sundari., Murgun (2011) in their studies on “A Study on Factors Influencing Post-Purchase Behaviour of Personal care Products in Chennai City” have tried to find the brand consciousness among women for personal care products. Study was done on almost 500 respondents in Chennai city. It has been studied that factors that effect on purchase decision of personal care products are key factors like price, quality and quantity. After key factory, the other factors which influence the buying decisions are ingredients, the purpose of the product, product brand image and certification of product.

Asiya Faisal Khan, Mohd. Faisal Khan (2013)- Researchers in their paper titled “A Study on the Awareness of Product Ingredients among Women Skin care users in State of Madhya Pradesh” have tried to find the ingredients awareness in skin care products among women users. The sample size is around 250. The findings of the study showed that women users have awareness on presence of ingredients in skin care products. Consumers are most concern on the quality of products. It is most important that manufacturers should invest on research to bring out most natural ingredients to make products safe and effective.

Phillip Kotler (1931)- Author has emphasised that consumers are the base and beginning point for all business activities. So, it is very significant to understand target consumers' needs, expectations. Consumer behavior is a complete study which covers activities of buyers' selection, purchase, consumption and dispose the products. It has shown factors affecting the buyer pre, during and post purchase.

Statement of the Problem- Growth in the demand of herbal products is inducing manufacturers to launch herbal products and increase the focus

and investment on research and development. Indian Herbal personal care products have various brands like herbal brands like Forest Essentials, Biotique, Himalaya Herbals, Blossom Kochhar, VLCC, Dabur, Lotus, Jovees, Kama Ayurveda, Patanjali, Just Herbs, and many more. Even foreign brands have inclined to introduce the natural ingredient products. The economy is witnessing the various new launch and start up in this segment of industry.

The study is with special reference to brands sold by some of popular companies like Dabur Ltd., Patanjali Ayurved Ltd., Himalaya Ltd., Biotique Pvt. Ltd, Lotus Herbal, Mamaearth, Wow Skin Science, Ayur Herbals and more. The study has tried to find the brand awareness across all age groups.

Objectives of the Study-

1. To study the growth of herbal personal care products in India.
2. To analyze consumers' brand awareness of different herbal personal care products in Mumbai City.

Research Methodology- Some specific methods will be taken for collection and analysis of data. These methods include;

Methods of Data Collection-

Primary Data- The primary data is collected from the consumers of the city of Mumbai. Data is collected through structured questionnaire covering the demographic features of consumers and objectives of study.

Secondary Data- Secondary data are those which have been collected by someone else and which already have been passed through statistical process. Secondary data is taken from books on herbalism, chemical used in non-herbal products, product repositioning, internet, newspaper, magazines and companies web sites, research journals and articles published, reports etc.

Population of study- This study is conducted in the Mumbai City, Maharashtra. The sample size will be around 90 consumers using personal care products. Questionnaire includes various demographic variables like age, gender, income groups and marital status. It covers the questions on different brand awareness. Sampling method selected is non-probability sampling based on convenience sampling.

Tools for Data analysis- Percentage method and Chi-square test are used in analysis of data collected.

Statement of Hypothesis-

Hypothesis 1

H0: There is no significant relationship between the gender and brand awareness of herbal personal care products.

H1: There is a significant relationship between the gender and brand awareness of herbal personal care products.

Hypothesis 2

H0: There is no significant relationship between age of consumer and brand awareness of newly launched herbal personal care product in Indian market.

H1: There is a significant relationship between age of consumer and brand awareness of newly launched herbal personal care product in Indian market.

Data Interpretation and Analysis-

1. Out of sample size of 90, number of females was 54 consisting of 60% and male 36 consisting of 40% of sample.
2. Age:

Age	16-25	26-30	31-35	36-40	41-45	46-50	Above 50 years
Number	32	13	4	6	5	15	15
%	35.56%	14.44%	4.44%	6.67%	5.55%	16.67%	16.67%

3. Out of 90 sample size, 5 (5.55%) do not use herbal personal products, 67 (74.45%) use the herbal personal care products and balance 18 (20%) use herbal personal care products sometimes.
4. In sample of 90 consumers, 41 are married, 43 unmarried and remaining 6 are single due to divorce/widow ship.
5. Following findings shows the number and percentage of consumers who are aware about different brands of herbal personal care products in Indian market.

Name of the Brand	Dabur	Patanjali	Himalaya Herbals	Mama earth	Lotus Herbals
No. of consumers	88	90	89	62	65
%	97.78%	100%	98.89%	68.88%	72.22%

Name of the Brand	Wow Skin Science	Biotique	Khadi Naturals	Ayur Herbals	VLCC	Forest Essentials
No. of consumers	48	63	60	54	68	48
%	53.33%	70%	66.67%	60%	75.56%	53.33%

6. Consumers were asked question which was Likert based on how he/she was well aware about different herbal brands. Following are the findings.

I am well aware about different herbal products	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
Male	7	16	3	10	0	36
Female	26	17	7	4	0	54

Hypothesis testing- While testing hypothesis 1 that there is not a significant relationship between gender and brand awareness of herbal personal care products, Chi-square test was applied. The data of total number of male and female and data received on Likert scale from strongly agree to strongly disagree was considered. Chi-squared score at degree of freedom of 4 was 12.0220 which is greater than 9.488 at Level of significance of 5%. Therefore, alternative hypothesis failed to reject.

Hence female consumers found to be more aware about various herbal personal care products. For testing the hypothesis 2 that there is not a significant relationship between age of consumer and awareness about newly launched herbal brands in market, Chi-square test was applied. Wow Skin Science and Mamaearth brands are taken into testing purpose as both are recent launched herbal brands in Indian market. The data on different age groups and number of consumer aware on recent launched brands of Wow Skin science and Mamaearth are considered. Following is table showing

brand awareness of Mama earth and Wow Skin Science over the different age groups.

Age groups	Mama earth	Wow skin science	Total
16 – 25	30	16	46
26 – 30	20	10	30
31 – 35	8	9	17
36 – 40	2	3	5
41 – 45	0	5	5
46 – 50	1	3	4
Above 50	1	2	3
Total	62	48	110

The calculated Chi-squared score at degree of freedom of 6 was 12.6088 which is greater than score of 12.592 at Level of significance of 5%. Hence, Alternative hypothesis failed to reject. Younger age group of population are aware about recent launched brands as compared to older age group of consumers.

Findings- Females as compared to males' consumers have more awareness on different herbal products. Females are found to be more sensitive and concerned on skin, hair and oral care for themselves and families. Regarding newly launched products, younger aged group have better updates than older aged group of consumers. The reason is younger aged group of people are more connected with different social media platforms and are better acquainted with knowledge and use of e-commerce.

Conclusion- With rise in demand for herbal personal care products, various new products, ventures and starts up are launched into Indian market. Where there is easy acceptance of natural and chemical free products, it becomes responsibility of manufacturer to take quality at priority level and also to market their product on different social media, Television advertisements etc to create brand awareness across all the age groups.

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**Consumer Behaviour:
Current Trends in Processed Food Products in Bihar**

• Saba Haidri

Abstract- Bihar is one of the largest producers of processed food in India. Processed food industry is the fastest growing industry in Bihar. The state has a large base of cost effective industrial labour, making it an ideal destination for processed food industry. The state enjoys a unique location's specific advantage because of its proximity to the vast markets of eastern and northern India. Moreover, the rising income and changing lifestyle in the cities as well as rural Bihar is changing the consumption demand of processed food. Therefore the state offers a substantial opportunity for the processed food industry and is expected to play a leading role in industrialization drive of state Bihar. The most promising processed food sectors include. Fast food, Ready to eat breakfast, Meat and poultry, Soft drink, Confectionary manufacture, Fishing, Aqua culture, Grain milling and Grain based products, Milk processing and Tomato paste etc.

Keywords- Consumer, Behaviour, Food Products

Introduction- A processed food is a food item that has a series of mechanical or chemical operations performed on it to change or preserve it. Processed foods are those that typically come in a box or bag and contain more than one item in the list of ingredients. As per The United States Federal Food, Drug and Cosmetic Act, Section 201, Chapter II, (gg) processed food as “any food other than a raw agricultural commodity and includes any raw agricultural commodity that has been subject to processing, such as canning, cooking, freezing, dehydration, or milling.”

Processed food basically involves any type of value addition to agricultural or horticultural produce and also includes processes such as grading, sorting, and packing which enhance shelf life of food products. The processed food industry provides vital linkages and synergies between industry and agricultural.

Processed food industry is one of the largest and fastest growing industries in Bihar in terms of production, growth, consumption and exports. Our country, India is the world's second largest producer of food next to china and has potential of being biggest industry with food and agricultural sector contributing 26 percent to India's GDP and Bihar's processed food industry plays a vital role in the growth and GDP of India. The food processing sector has long been seen as a promising route to economic transformation in Bihar.

Processed food industry has been targeted by successive policies of

the government of Bihar as the leading sector for industrialization in the state with a very low industrial base.

Three important industrial Schemes (2006, 2011 and 2016) with varying degrees of pecuniary (front – loaded capital Subsidies, interest subsidies, tax exemption) has been implemented to empower processed food industries in the state of Bihar. The most promising processed food sectors in Bihar are:

Fast food, Ready to eat Breakfast, Meat and Poultry, Soft drink bottling, confectionary manufacture, Fishing, Aquaculture, Grain Milling and Grain based products, Milk processing and Tomato Paste.

Benefits of Processed Food-

1. Making the perishable & seasonal food available throughout the year.
2. Saves time and reduce energy most of the processed food needs little or no cooking so it's easy to eat it.
3. Stabilize prices of food, as there is less scope of shortage of supply to demand.
4. Reduce wastage of food by preventing decay or spoiling of food.
5. Preserved food help people to bring a variety in the diet. Thereby, decreasing nutritional inadequacies.
6. Milk is pasteurized to kill bacteria which make it germs free. Drinking pasteurized milk is better than drinking fresh milk.
7. Sometimes processed food is much easier to preserve than natural food spoilage occurs late in processed food.

Disadvantages of Processed Food-

1. Canned food with large amounts of sodium or fat.
2. Pasta meals made with refined white flour instead of whole grains.
3. Processed food can lead to various kinds of diseases.
4. The biggest bottleneck in expanding the food processing sector, in terms of both investment and exports, is lack of adequate infrastructure.
5. Cold chain facilities are miserably inadequate to meet the increasing production of various perishable products like milk, fruits, vegetable, poultry, fisheries etc.
6. Prevention of Food Adulteration laws is not only stringent one but time consuming also. It substantially varies from Codex standard. Harmonization of multiple food laws is an urgent necessity.

The Risk Associated with Consumption of Processed Food-

- **Cancer-** Due to carcinogenic properties, sodium nitrate, milling process & extremely toxic additive, include in processed food which leads to nutritional deficiencies, brain tumours, leukaemia, & cancers of the digestive tract.
- **Obesity-** Processed foods are most often high in fat, sugar and salt.

If counting food calories, these are the perfect ingredients to cause excessive weight gain.

- **High carbon content-** Most processed foods include an overabundance of carbohydrates and not nearly enough protein. It does not promote mastication or chewing.
- **Heart disease-** The trans-fat in many processed foods will spike the cholesterol level and lower the HDL. Sodium nitrate is strongly correlated with Hydrogenated vegetable oil which is a dangerous form of dietary fat that promotes nervous system disorders and aggressively attacks cardiovascular health in humans.
- **Hypertension-** Blood pressure is elevated by the high salt and fat content in foods, like salty breakfast in cereals. The high products and fast acting carbohydrates will raise the glucose to unhealthy levels, where it leads to diabetes.

Statement of the Problem- This is also evident from the presence of several global foods giants and leading Bihar's industrial enterprises in the country's food processing sector, such as Mc Cain Food Ltd., MTR Food Ltd., Knorr India, Kohinoor Food, Nestle India, Everest Foods, Mondelez India Pvt. Ltd., Quality Foods, Amul, Venkys India Ltd, Sudha, Maggi, Haldiram's, LT Food Ltd. (Daawat), Maiyas Food Ltd., Besides, in the current trends surplus food production, as well as the increasing preference for Indian food (in several regions of the country) need to be leveraged to achieve economic and strategic objectives through exports. The satisfaction of the Consumer is very important for any industry (or) a company to survive in the market. It is mainly concerned with the desire consumers regarding the specialization and improvement of the product wanted by them. The study is mainly made on the factors yielding (or) affecting optimum level of satisfaction to the consumers for the betterment of processed food products sales in Bihar. The study is mainly concentrated to know the Bihar consumer satisfaction and their perception towards processed food products.

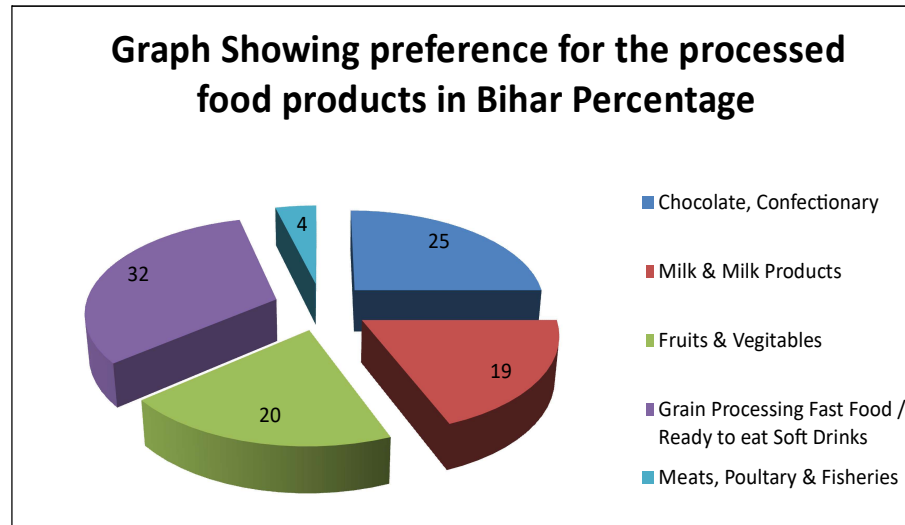
Objectives of the Study-

1. To Study the consumer satisfaction towards processed food products in Bihar.
2. To study the pros and cons of the consumer towards processed food products in Bihar.
3. To study whether there should be any improvement in the quality of the product.
4. To study whether the consumers are benefited through processed food products in Bihar.
5. To identify the consumers brand preferences for the consumers of Bihar.
6. To analyze factors influencing the buying behaviour of processed Food Products in Bihar.

Sampling Size-

1. 100 consumers were considered for my study.
2. The questionnaire method used to collect data for the study.
3. The top most leading brands in processed Food products in Bihar are MTR, Mother's choice, Nestle, Amul, Knorr, Kwalitiy, Nandini, Haldirams, Maiyas etc.,.
4. Detailed information is provided for the selective brands.

The Major Finding of the Study is as follows- Among 100 respondents, none of the respondents prefer beverages related to alcoholics and 100 percent respondents prefer non alcoholics (juice, cold drinks etc.)



Interpretation (refer Table below)- Out of 100 respondents, Following are the preference of consumers (Please refer table below)-

- 30 percent prefer Mc Cain Products.
- 25 percent prefer Nestle Products.
- 20 percent prefer Kwalitiy foods Products.
- 12 percent prefer Knorr products.
- 13 percent prefer Mondelez India Pvt. Ltd. Products.

From the above it is found that the most of the respondents prefer ready to eat product other like chocolate, confectionary products.

Table Showing Brands Preferred User's of Processed Food Products.

Sl. No.	Brands Preferred	No. of respondents	Percentage
1	Mc Cain	30	30
2	Nestle	25	25
3	Kwalitiy Foods	20	20
4	Knorr	12	12
5	Mondelez India Pvt. Ltd.	13	13
	Total	100	100

(Sources: Primary Data)

Conclusion- In the present Scenario the processed food industries should be aware of the changing mind set of the consumer's requirement in the state of Bihar. This can be done with the help of Research & Development department, which also leads an effective production & with a targeted margin of profit. Hence it is advised to the processed food industries in Bihar to come out with a better offer's which will be useful to all age groups. As per this survey it is clear that the both consumers in Bihar are 100 Percent satisfied with consumption of processed food products in the modern world. An effective & healthy advertisement should be given to attract the consumers. An attractive and quality packing should be used for the processed food items so that it attracts the consumers & maintains the quality of the processed food products for a long period.

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Socio-Economic Scenario and Political socialization of Children in Shivamogga District

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Abstract- *Political Socialization is concerned with the political learning of the individual about the political system. It provides him an opportunity to learn and acquire the basic orientations necessary for the maintenance of a political system. In a democratic country a citizen must have these orientations and patterns of behavior. These are essential to maintain stability and sustainability of the political system. Children acquire all these through the process of political socialization. It is through this process political culture passes from one generation to another. Political culture is a pattern of individual attitudes, beliefs, values and orientations towards politics among the members of a political system. The growth and development of any nation largely depends on the active participation of the student community in these socio- political and cultural patterns of a society. In India people belong to various cultural, regional, ethnic and linguistic backgrounds live together. The task of integrating and uniting them to build a strong nation is a challenging task. The high school students of Shivamogga district have different religious, linguistic and socio-economic backgrounds. The present article throws a light on to know how the parental socio- economic background helps them to learn politics through this process.*

Keywords- *-Economic Scenario, Political socialization, political learning*

Introduction- Introduction: Man is born free but finds himself constantly in a meaningful social environment. He tends to cultivate societal values, beliefs and norms in society. The process by which the social life of an individual is shaped is called 'socialization'. Much of his behavior is acquisitional. Society prescribes and enforces certain norms to follow so to become acceptable members of the society. This type of social training is a continues and never ending process. In this process man tends to establish his social, economic and political rapport with others and learn attitudes and behavioural patterns. Thus, 'Socialization' is a process of transforming the human animal into a human being or of converting the biological being into a social being.¹

Man is not only a social being but also a political being. Along with social norms, political values are also internalized simultaneously. The agents of political socialization namely, family, school, peer groups, mass media and political parties play an integral role in different levels in this process. This process is called 'political socialization'. Although, the concept political socialization has gained prominence quite recently, its origin can be

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traced back to the ancient Greek political philosophers like, Plato and Aristotle. In their works they gave more significance to train and educate the youth in order to preserve the existing social and political systems. In the later period, it took concrete shape in the writings of western philosophical thinkers.

Political Socialization is concerned with the political learning of the individual about the political system. It provides him an opportunity to learn and acquire the basic orientations necessary for the maintenance of a political system. In a democratic nation a citizen must have these orientations and patterns of behavior. These are essential to maintain stability and sustain ability of the political system. Children acquire all these through the process of political socialization. It is through this process political culture passes from one generation to another. Political culture is a pattern of individual attitudes, beliefs, values and orientations towards politics among the members of a political system". These views are endorsed by Almond and Powell and Lucian pye. It also refers to the individual as well as the societal orientations of the people. Individual orientations shape the society and at the same time, societal orientations help to mould the individual's orientations and beliefs. Both are complementary to each other.

Political orientations are of three types namely, Cognitive, Affective and Evaluative orientation. The concept cognitive orientation refers to an individual's acquisitional knowledge and awareness of political system. Affective orientation deals one's feelings, attachments, involvements and participation in various political activities. Evaluative orientation pertains to assessment and judgement on the various aspects related to political system. Thus, all the three types of political orientations are significant and vital for the younger generation before they begin to play the political roles in society. The growth and development of any nation largely depends on the active participation of the student community and involvement in these socio-political and cultural patterns of a society. The process of political Socialization not merely concerned with the maintenance of the existing pattern of political culture, but is also imbibing in transforming and creating a new political culture among them.²

In India people belong to various cultural, regional, ethnic and linguistic backgrounds live together. The task of integrating and uniting them to build a strong nation is a daunting and challenging task. The high school students in Shivamogga district have different religious, linguistic and socio-economic backgrounds. It is very important to understand the political orientations of the students of different types of schools in this district. This study explicates a brief analysis of the demographic background of the students in the formal educational system in a modern society. The socio-economic status comprises of students age, Sex, caste, language, education, as well as their parents occupation and income. All these aspects have a close correlation with the level of their political socialization in a political system.

Objectives of the Study- The present study includes the following objectives, which are:

1. To know the nature of political socialization among the students and their common understanding about politics.
2. To study as to how different agencies of political socialization shapes the students political attitude and behavior.
3. To understand the parental influence over the students political learning.
4. To know the role of socio-economic and educational factors of family in shaping and molding the attitudes and outlooks of student towards politics.
5. To assess the students political orientations, such as political awareness, political participation and evaluative orientation.

Hypothesis- The present study in addition to the objectives also set the hypothesis namely.

1. A sense of political consciousness develops along with the growth, age and the level of education among high school students.
2. In the initial stages Girls tend to be politically more conscious than the boys.
3. Political awareness, political participation and evaluative orientations are found high among the students of lower caste and the students of towns while compared to the village student
4. Mass media, Parents education, profession and income are the factors that influence the process of political socialization of students.
5. Government high school students are politically aware and their participation and evaluative orientation is better than the students of the aided and the unaided schools.

Area of study- The present study centers on the process of political socialization through different political orientations among the high school students of Shimoga and shikaripura taluqs of Shivamogga district.

Scope of the study- The present study relates and restricts to the political socialization of high school students in Shivamogga district the present research study covers the high school children belonging to the age group of 13 to 16 years. Three types of school, namely, Government, private aided and unaided high schools are covered to understand the political orientations among the students.

Importance of the study- India is the largest democratic and fast developing country in the world. The study of political socialization is very essential, because the strength and sustain ability of the democratic system require more and more citizens' participation, which mainly depends upon the acquisition of political learning of the people. Thus, political learning has to begin at the early age.

In India more than half of the population belongs to the younger group, who are considered as the pillar and resources of a country. They can shape the future of the country. Hence it is much needed to channelize them towards nation building activities and politics. It is through the process of political socialization, they can imbibe the democratic orientations, which are very essential in order to make the political system stronger. Thus, pre-

adult period is the best period to mould and shape the children towards politics. "What was learned at the earliest was learned best."

Methodology- In view of the nature of the problem and techniques to be used, it is very clear at the outset that, the researcher has collected data's from both primary and secondary sources. While collecting the data a combination method of survey and observation have been employed. This in turn has contributed to make an in-depth study in covering all aspects of patterns and challenges to political socialization of high school students. A comprehensive study of political socialization of students has been conducted in support of the research study.

Tools for data collection- Since the study is a comprehensive one, the researcher has employed several field study tools. Which include both primary and secondary data. This gives validity to the study and to makes it exhaustive one, Primary data is collected by using structured questionnaire and schedule (both in English and Kannada medium) to elicit the response from the respondents, namely high school students. The questionnaire broadly encompasses the respondent's personal information, their socio-economic and educational back ground, importance of agents of political socialization and political orientations Secondary data has been collected from published and unpublished literature on political socialization of high school students to analyze their political awareness, political participation and evaluative orientation. It includes book, reviews, working papers, articles, journals, newspapers and other related documents from D.D.P.I., B.E.O. and statistical department documents regarding number of schools, number of students. Ratio of boys and girls, number of schools government, the Private aided and the unaided schools.

Field work- The major field work has been conducted in collecting the relevant materials and field data is used as a continuous process till the completion of the research work. The researcher has adopted non-participant observation technique to supplement the data collected through the questionnaire.

The researcher has selected three types of school such as, government, Private aided and unaided schools in both Shimoga and Shikaripura Taluks. The collected data has been tabulated, coded and decoded manually and also using computers. Analysis of information and tables is done by using percentage as well as verbal descriptions.

Sampling Method- In order to make the study more comprehensive two sample methods are employed by the researcher namely, a). Simple Random sampling b). The systematic sampling method. In Shimoga district, there are 343 high schools. of them 150 high schools are situated in the taluks(two)are selected for study. 20% of 150 high schools are selected for make it a scientific study. 20% means, 30 high schools, which include both government and private aided and unaided high schools.

Sample size- In the present sample study equal weight age has been given to all the three types of schools. From each types of school 10 high schools have been selected. Total 30 high schools are taken to the present study. 466 respondents have been drawn from all the 30 high schools.

Political socialization of students of high school in Shivamogga district-

Based on the comprehensive analysis of the levels of political orientations of the respondents of Shimoga and Shikaripura taluks. The researcher has tabulated and analyzed the level of political socialization and the learning levels of the respondents on the basis of demographic variables grouped in two parts. The first part includes type of schools, age, class, sex and caste and the second part includes parents' education, occupation and income. In order to prepare the political socialization profile of the high school students. All the scores of the three political orientations namely, cognitive, affective and evaluative orientation are pooled. Scores up to 40% put in low category, 41% to 70% in medium and 71% and above is considered high category of political socialization. The analysis of data showed that, out of 466 respondents 61(13.09%) had low level of political socialization. 259(55.58%) medium and 146(31.33%) high. The table 5.30 shown below explicates the analyses of the variables mentioned above.

Table-01
Process of Political Socialization

1-Type of school	High	Medium	Low	Total
Government	42 21.11	136 68.34	21 10.55	199 100
Aided	30 20.69	83 57.24	32 22.07	145 100
Unaided	74 60.66	40 32.79	08 6.55	122 100
Total	146 31.33	259 55.58	61 13.09	466 100
2-AgeGroups	37 24.03	93 60.39	24 15.58	154 100
lower age group				
middle age group	94 34.31	145 52.92	35 12.77	274 100
Higher age group	15 39.48	21 55.26	02 5.26	38 100
Total	146 31.33	259 55.58	61 13.09	466 100
3-Class 8 th std	33 21.71	96 63.16	23 15.13	152 100
9 th std	46 27.71	95 57.23	25 15.06	166 100
10 th std	67 45.27	68 45.95	13 8.78	148 100
Total	146 31.33	259 55.58	61 13.09	466 100
4-Sex Boys	68 26.77	111 52.36	33 15.57	212 100
Girls	78 30.71	148 58.27	28 11.02	254 100
Total	146 31.33	259 55.58	61 13.09	466 100
5-Caste General	58 29.74	109 55.90	28 14.36	195 100
OBCs	47 31.76	78 52.70	23 15.54	148 100
SCs & STs	41 33.33	72 58.54	10 8.13	123 100
Total	146 31.33	259 55.58	61 13.09	466 100

Source; Field Survey, (Note Age; lower age group-13years, middle age group-14-15 years and higher age group-16and above)

The first component discussed in the table 1 shown above reveals the level of political socialization among the students who belong to the government, the aided and the unaided schools. Among these schools, the respondents of the unaided schools reign top with 60.66% as compared to the government schools and the aided schools i.e. 24.11% and 20.69% respectively. At the medium level the respondents of government schools tops the list with 68.34% when compared to the aided and the unaided schools i.e. 57.24% and 32.79% respectively. At the low level the aided schools stands first with 22.07% whereas the government and the unaided schools occupy the second and the third position respectively. Thus, it can be inferred that, Political socialization is high among the respondents of the

unaided schools. It is because of the better educational background of their parents and they are financially sound enough to send their children to such schools which provide better educational opportunities to them. In addition to that, sizable strength is also responsible for the students increasing level of political socialization.

With regard to the second component that is the age, 39.48% of the respondents of the higher age-group possess high political socialization when compared to the other two age-groups namely, the middle and the lower age groups. Their political socialization level stands at 34.31% and 24.03% respectively. At the medium level, political socialization is high among the respondents of the lower age group i.e. 60.39% and it is more or less equal 55.26% among the middle and the higher age group that is 55.92% and 55.26% respectively. At the lower level, it is vice-versa where the level of political socialization increases with the decrease in the age levels of the respondents. From the above table it is very clear that, as the age increases their level of political socialization increases. The main reason for this is, as the age advances they begin to shoulder the political responsibility. It is the sign of maturity. The higher age-group students have the greater access media and other forms of informal education. They tend to develop judging ability on their own with regard to political system.

The third variable in this table relates to class of the respondents in which they study. The students of 10th standard possess a very high level of political socialization that is, 45.27% as compared to 9th and 8th standards which is, 27.71% and 21.71% respectively. At the medium and low level, the process of political socialization decreases with the increase in their level of classes. At the lower level both 8th and 9th standard students have more or less equal in their political socialization level. But it is found low among the 10th standard students. The students of 10th standard have higher political awareness due to their maturity in thinking and judging on the various political issues. Family and society expects the same from them. With the advancement of age they acquire their own ways to think, to judge, to evaluate and to understand better than the other respondents of 8th and 9th standards.

Sex as the fourth variable discussed in the above table. It explicates the fact that, the process of political socialization and awareness is found high among the girls that is 30.71% when compared to the boys' i.e. 26.77%. At the medium level girls also stand first i.e. 58.27% as compared to the boys i.e. 52.36%. In low level, the boys occupy the first place that is, 15.57% when compared to the girls that are, and 11.02%. The prime reason for this kind of development is girls are the keen observers of politics. Parents pay equal attention to educate their girl child. They have realized that, education is the major potential source to realize the true worth their girl child. They can contribute to family, society and even to the nation in their own way.

The last variable relates to the caste background of the respondents. The level of political socialization is found high among the respondents of SCs and STs that is, 33.33% when compared to the OBC and General Category i.e. 31.76% and 29.74% respectively. At the medium level also their political socialization level is high i.e. 58.54% whereas it is, 55.90% and

52.70% respectively found among the General and OBC categories. At the lower level the respondents of OBC category claim first i.e.15.54% when compared to the two other castes it is 14.36% and 8.13% among the General and SCs /STs Categories. The reasons for the high level of political Socialization among the SCs and STs Categories is, as their parents have withstood many difficulties in society and they do not want their children to experience them.. Hence the Parents of such categories have sensed the importance of their children's education. Education is one of the detrimental factors to overcome their backwardness. Constitutional provisions led them to the increase in their awareness and in their active participation in a political system. Although the General Category students are aware of the political process, yet they are not keen to take active participation. Because they are much interested in the academic improvement and they are professionally oriented. After understanding the influence of demographic variables in the process of student's political socialization, the researcher has made an attempt to analyse the parents' socio-economic background in the process of political socialization of the respondents. The table 3.31 shown below depicts clearly the parent's education, occupation and income level of the students.

Table-02
Process of Political Socialization
and Respondents Parental Socio-Economic Background

Parents Education	High	Medium	Low	Total
Illiterates	32 24.81	83 64.34	14 10.85	129 100
Primary	42 28.97	83 57.24	20 13.79	145 100
High school	40 31.25	69 53.91	19 14.84	128 100
PUC	09 42.86	08 38.10	04 19.04	21 100
Degree	21 52.26	13 34.21	04 10.53	38 100
Post Graduate	02 66.67	02 33.33	--- -----	93 100
Technical	01 50.00	01 50.00	---- -----	02 100
Total	146 31.33	259 55.58	61 13.09	466 100
Parents occupation				
Agriculture	50 28.25	102 57.63	25 14.12	177 100
Business	23 30.67	39 52.00	13 17.33	75 100
Official	21 51.22	15 36.58	05 12.20	41 100
Skilled worker	15 41.67	18 50.00	03 08.33	36 100
Labour	38 27.74	84 61.31	15 10.95	137 100
Total	146 31.33	259 55.58	61 13.09	466 100
Parents income				
below 50,000-	99 29.82	197 59.34	36 10.84	332 100
50,000 to 1 Lac-	36 33.96	50 47.17	20 18.87	106 100
1 Lac t 3 Lac-	08 34.78	10 43.48	05 21.74	23 100
3 Lac and above-	03 60.00	02 40.00	--- -----	05 100
Total	146 31.33	259 55.58	61 13.09	466 100

Source- Field survey

The table above reflects on the influence of parental education on their children's political socialization, the high level of political socialization is found among the respondents whose parents are post graduates i.e., 66.67%. It is 52.26% and 50% among the respondent's whose parents are graduates and technical or professional courses respectively. But it is 42.86% among the P.U.C. 31.25% among the high school (matriculation) and 28.97% among the primary education. Lastly, it is 24.81% with the illiterates. It is reverse in case of the medium level; here the level of political

socialization is decreases as their parents' educational level increases. At the lower level we can find the increasing level of political socialization up to PUC level. But only 10.53% of the respondents found in this level from the parents of graduation. The notable aspect is there are no respondents from the parents of post graduation and professional courses. Higher the educational background of the parents it helps the children to think, to judge and to evaluate various political issues on their own. Parental guidance and exposure to media contributes in this direction. Thus it can be inferred that, parental educational background plays a crucial role in bringing up the children towards political socialization. The next variable is, parent's occupation and its influence on the process of political socialization among the high school children.

The table above 2 depicts it clearly that, the high level of Political Socialization is found among the respondents who belong to the official families' i.e.51.22% as compared to the skilled workers and the business class i.e. 41.67% and 30.67% respectively. Among the agriculturists and labour class it is more or less same that is, 28.25% and 27.74% respectively. It is important to note that, at the medium level with the increase in their occupational status the process of political socialization decreases among the students. At the lower level, the influence of parents' occupation on the political socialization process varies from one profession to another. It is 17.33% among the respondents of the business group families, 14.12% among the agricultural families, 12.20% among the official and 10.95% among the labour communities. It is only 8.33% among the children who come from skilled worker's families. The reason for the higher level of political socialization found among the respondents of the parents of higher occupational groups. It is because the students give more importance to academic achievements than to political participation. At the same time, parental income also has a direct impact on the children's political socialization process as shown in the above table.

The table above clearly reveals that, the high level of political socialization is found among the respondents whose parents come in high income group of 3 lakhs and above that is, 60% while it is 34.78% in the income group of Rs.100, 000, to 3, 00,000 and in the income group of Rs.50, 000 to 1, 00,000 it is 33.96% and lastly it is 29.82% among the respondents whose parents have an income below Rs50, 000. At the medium level political socialization of the respondents decreases with the increase in the income of the parents. At the lower level one can see a steady rise in the level of political socialization with the rise in their parents' income. Thus, both at the higher and the lower level there is a steady rise in the level of political socialization with the increase in the parents' income. Money plays a pivotal role in determining the level of political socialization. The students who come from such family backgrounds have the knowledge about the political process.

Research study Findings; The aim of this empirical study is to examine and to assess the nature and extent of political socialization among high school students and its impact on their political orientations. Here the researcher has found how children have been successful in acquiring political orientations

and the way they understand the functioning of democratic institutions in India. The following are the findings with regard to the role played by the agents of political socialization.

The first objective of the study is related to know the nature of political socialization of students and their common understanding about politics. To test the level of political awareness questions were asked about the constitution, central, state and local governments, fundamental rights, elections and voting behavior, political parties and Political values such as, national flag, national anthem and the celebration of national festivals. The students are well aware of these issues. Majority of the children possess a great awareness about political values. Parents' discussion at home and teacher's role in school have also made them to acquire the knowledge about such issues.

The second component objective is, affective orientation. Here the attitudes of children are discussed towards their participation in school co-curricular activities, school elections and strikes. About 96.99% of the Students have participated in co-curricular activities conducted in their respective schools.

Thirdly, the researcher made an assessment of the level of student's awareness about political system and political issues, which mainly include the knowledge about parliamentary form of government. About 67.39% have extended and supported the existing parliamentary form of government. 98% of them believed that, voting is the most sacred political duty of every citizen of this country. At the same time 66% of the respondents like to prefer right candidates at the time of election. This shows their level of socialization towards voting behavior and their understanding about democracy i.e. "ballet is more powerful than the bullet".

The fourth objective of the study is to assess how different agencies of political socialization shape the students political attitudes and behavior. The researcher observed that, the joint families as compared to nuclear families influence the children more in acquiring political knowledge and skills. Because, the parents of nuclear families do not get enough time to inculcate these values. About 49.73% of the respondents in joint families do discuss politics with their parents with freedom and frankness.

Similarly, 46.57% of the students discuss political events or issues with their teachers in the civics class. This in turn enriches their knowledge about the politics. 89% of the students have admitted positively that, civics taught in the class room enriched their political knowledge. The same issue when we apply to the sex-wise, it is noted that, girls are in more number expressed positively that, civics topics improve their political knowledge and awareness. In relation to this, they actively participate in programmes like mock parliament conducted in their schools. 63.09% of the students have agreed in this respect. This in turn helps them to develop participatory orientation.

In order to assess the role of parents in shaping and mouldings the student's political behavior. 47.64% of them discuss political issues freely with their family members. The problem of the remaining respondents was, their parents are either busy with their work or do not allow or encourage them to discuss such issues. They have a preconceived

notion that politics is not meant for them.

The other major objective of the study is related to the role played by socio-economic and educational background of the members of family in shaping and moulding the political attitudes and outlook of the students. The results of the survey exhibit the fact that, all these factors play a greater role in creating the political awareness among them. This is found more in such families which are socially, economically and educationally advanced and the parents have positive outlook to induce political values among their children.

The fifth and final objective of the research study is, to assess the student's political orientations namely, political awareness, political participation and assessment or judgement of political issues. The responses prove the fact that, the level of political orientations among children is found in ascending order. The level of political orientations among children is found in ascending order. i.e. respectively political awareness 103(22.10%), political participation 120(25.75%) and evaluative orientation 192 (41.20%) each out of 466 respondents. The main reason for this is, the influence of three agents of political socialization namely, family, school and political parties. The family plays a crucial role in inculcating political awareness through political discussions. School helps them to develop participatory orientation through its co-curricular activities. At the same time political parties also influence them by exposing them to practice world of politics.

Conclusion- At the outset, in India one can confidently argue that, the children of high school are better exposed to the political socialization process. Though their level of cognitive, affective and evaluative orientations are not up our ever expectations. Yet, they have shown keen interest to learn the issues pertaining to political, economics and societal values. If all the students actively participate in all the school activities, they can develop better political and social responsibilities. School children must be constantly made aware of the values of social, political and cultural responsibilities. Text-books should provide motivation, inspiration and proper instructions so to make them to become responsible citizens of the country. The process of political socialization of the children of high school become more realistic and meaningful, if all agents of political socialization (family, school, peer group, mass media and political parties) play their responsible roles in their respective domain. The process of Political socialization will become a mere dream when committed and dedicated efforts are not made in this direction. We should not develop a negative attitude among the children towards political socialization. We should take it in a positive sense to train, to guide, to motivate and inspire them to make them functioning and responsible members of a political system. The study needs to be carried forward.

Reference-

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Law of Sedition Requires Alteration or Deletion?

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Abstract- *A modern democratic state cannot be presumed without freedom of expression to its citizens. Though the law of sedition was an inevitable feature of autocratic states, Rulers used the law of sedition to stifle voices against them in the medieval period. Still, the law of sedition exists in many democratic countries. India is one of the countries where the law of sedition was used by the British against persons who were spreading a feeling of resentment against the British administration. After India became Independent democratic state strong reasons were required for sedition to be continued in the law books. In the recent past few incidents have revived old debate on having a law of sedition in law books. This debate moots many questions such as, whether merely words may amount to sedition. If yes, than when words may amount to sedition? Can criticism of the government in office and its policy amount to sedition, some threat to the unity and integrity of the country is necessary? Reasons for continuation with sedition law still exist in an independent and democratic country or not. Is there any change in the judicial policy, related to inflicting the law of sedition against its citizens? Does Supreme Court opinion in the Kedarnath case is still relevant after the sixteenth amendment which inserted Sovereignty and Integrity of India as one of the grounds on which Freedom of speech can be curtailed? This paper is also an attempt to analyze Supreme Court direction in the Common Cause case.*

Keywords- *Sedition, Treason, Freedom of speech, Restriction on freedom of speech, Criticism of Government.*

Introduction- History is full of instances where the change in power occurs by toppling the existing ruler. Apprehension of being killed or revolt against the ruler led to the birth of stringent rules in autocratic states of the medieval period. By the time modern states came into existence these stringent rules transformed into various branches, Law of sedition is one of them. This branch of law was an instrument in the hand of the ruling class to crush the inimical voices which had tended to become revolt. Every state whatsoever is the form of government must be armed with the power to punish those who by their conduct jeopardizes safety and stability and disseminate feelings of disloyalty tending to lead to disruption and disorder. In Modern democratic states, freedom of speech is the sine qua non. Right to expression is prior most right exercised by the human being after taking birth. All other freedoms originate from Freedom of Speech. The Supreme court has also recognized, certain freedoms inherent in the right to speech

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Such as the Right to fly the national flag, the Right to sing the national anthem, the Right to silence, the Right to Information, Freedom of the press, Right to Commercial Advertisement and many more. No freedom can be absolute so do the Freedom of speech. An individual can enjoy Freedom of Speech at the cost of injury to the state unity or integrity or Individual freedom must be sacrificed in the name of the security of the state. Roscoe Pound in his theory of social engineering, suggest that collective interest prevails over individual interest. But Modern Democratic states are created on the philosophy of individual welfare, should continue with the law having a tag of harsh law of the medieval period. This old debate resurfaced due to incidents in the recent past where innocent persons who were not in political battle booked under section 124A of IPC for pointing out prevailing wrongs in the administrative system. Indicating the failure of the current political regime is the basis of democracy. Recently Supreme Court has also accepted a petition filed on behalf of two Journalists for challenging the constitutionality of section 124 A. For a better understanding of sedition law historical perusal of the law of the sedition is imperative.

Law of Sedition in UK and USA- In England King was supposed to be having divine authority hence required to be respected, to protect the king from disrespect law of sedition was introduced by Statute of Westminster 1275, foremost case *De Libellis Famosis* established Fair and true criticism of the government is having a higher tendency to disrespect government consequently require greater prohibition. Further Law Commission of UK in 1977 referring Canadian case in its paper opined that only those activities which incite disturbance, create the problem of law, and order and violence with intention of disturbing constitutional authority will amount to seditious act. Law commission also recommended in the same paper that ordinary statutory and common law must be utilized rather than the law of sedition, which has political implications. Eventually, sedition law demised with the passing of the Coroners and Justice Act, 2009.

In the USA Sedition Act, 1789 introduced sedition as a punishable offence; this was repealed in the year 1820. During World War I, exigency to protect the interest of the USA led to the reintroduction of the law of sedition in the year 1918. Courts in the US have given slender meaning to the law of sedition to shrink the scope of emergency law in a normal state of affairs by developing various doctrines. Such as the Reasonable listeners' test, present danger test, Fighting words for protecting freedom of expression.

Law of Sedition in India- In the year 1837 when the Indian penal code was drafted by the First law commission (T B Macaulay in particular), it recommended the punishment of five years for the offence of sedition. Surprisingly when the Indian Penal Code was enacted on the First of January 1860, the provision of sedition was missing. The Omission was not deliberate but due to oversight. Subsequently, the offence of sedition was included in Section 124 A. an object of this insertion was to penalize those who were inciting disaffection against the British government. This section was included in addition to waging war against the government and statement

made to induce a person to commit an offence against the state. Let's examine whether this section serves a different purpose than the already existing one.

Difference in Section 121, 124A, and 505(1) b- It is submitted that in no circumstances Sec. 124A can be equated to Sec. 121 or 505. Sec. 124A as it stands today follows-

Sedition- Whoever, by words, either spoken or written, or by signs, or by visible representation, or otherwise, brings or attempts to bring into hatred or contempt, or excites or attempts to excite disaffection towards, the Government established by law in India, shall be punished with imprisonment for life, to which fine may be added, or with imprisonment which may extend to three years, to which fine may be added, or with fine.

Explanation 1- The expression "disaffection" includes disloyalty and all feelings of enmity. Explanation 2- Comments expressing disapprobation of the measures of the Government with a view to obtain their alteration by lawful means, without exciting or attempting to excite hatred, contempt or disaffection, do not constitute an offence under this section.

Explanation 3- Comments expressing disapprobation of the administrative or other action of the Government without exciting or attempting to excite hatred, contempt or disaffection, do not constitute an offence under this section.

Though Section 121 runs as follows

Waging, or attempting to wage war, or abetting waging of war, against the Government of India-Whoever, wages war against the Government of India, or attempts to wage such war, or abets the waging of such war, shall be punished with death, or imprisonment for life and shall also be liable to fine.

The bare reading of Sections suggests mere words may amount to sedition but the offence of waging war against the government cannot be done without war (other than War of words). Abetment to wage war against the government can be by words, but it differs from sedition in a way that, when words are enticing to raise weapons for the war against government offence is covered under sec. 121 not under 124A. Element of use of force or abetment to use force is inherent in section 121 but the same is missing from 124A. When words or representation made fall short to be covered under sec. 121 but good enough to bring feelings of hatred, contempt, disaffection, disloyalty, enmity towards the government established by law it will amount to sedition. When the effect of words is not visible on the ground but present in the form of the mental feeling offence of sedition is complete. Explanation 2 makes it clear that mere disagreement, condemnation with the view to alter measures of the government is not sedition. This explanation brings intention into consideration. No person can be punished for sedition if the intention behind the words is to put forth fault of government, to rectify them. Explanation 3 further clear when disagreement, condemnation leads to hatred, contempt, or disaffection it will amount to sedition otherwise not. Consequently, the offence of sedition is complete when a mental feeling of hatred, contempt, or disaffection is created or attempted to be created, we may conclude Sedition is the first step which may grow up to a more serious offence of waging war against the government, waging war may be a

repercussion of the offence of sedition.

Sec. 505(1)b talks about inducement to commit an offence against the state in the following words-

Sec.500 Statements conducing to public mischief-

(1)Whoever makes, publishes or circulates any statement, rumor or report,—

(a)..... (b) with intent to cause, or which is likely to cause, fear or alarm to the public, or to any section of the public whereby any person may be induced to commit an offence against the State or against the public tranquility.....

Shall be punished with imprisonment which may extend to three years, or with fine, or with both. The dissimilarity between sec. 500(1)b is that it provides punishment for inducing to commit an offence against the state, thereby it will be applicable when some person is induced to commit an offence of sedition or waging war against government by any publication, circulation of the statement, rumor or report. The purpose which sec. 124A and 505(1) b serves are different, earlier one prevents circulation of such material which extends the feeling of dissatisfaction, hatred, contempt against government nevertheless latter one prevents inducement to commit offences against the state. There can be cases where inducement and disaffection against the government simultaneously occur in that case prosecution will have the choice to prosecute under either section or both. Also, there can be cases where inducement is unescorted by the feeling of disaffection or vice-versa. Consequently, we may deduce sec. 124 A assist us to achieve which cannot be done by any other existing sections. James Stephen also opines, in the absence of such provision the offence of sedition is would be penalized under common law.

Pre-Independence Judicial Interpretation of Section 124 A- An apprehension that Section 124 A shall be extensively used to stifle the free speech by the press, can be judge by considering few cases. Foremost of them is the JC Bose case, where the accused was booked for highlighting the negative impact of British Colonialism on the Indian economy. Calcutta High Court directing the jury quoted James Stephen's words, 'those acts that were done with an intention to resist by force or an attempt to excite resistance by force fell under this section. In the opinion of the author, this proposition is completely wrong as nowhere language used in section suggests act done with the intention to resist by force fell under this section. It was also directed to the jury that “words calculated to create a disposition not to obey the lawful authority of the Government, or to subvert or resist that authority, with the intention of creating such a disposition, he will be guilty of the offence of attempting to excite disaffection within the meaning of the section, though no disturbance is brought about by his words or any feeling of disaffection, produced by them”. This proposition seems to be proper as bare provision does not make difference in punishment for an attempt or successful act. However in this case, due to an apology tender by the J C Bose court could not arrive at a final decision. There can be various grounds for the court to dealt with the case softly first tender of apology by

the accused, secondly opinion that article to be interpreted in totality usher court that article in no way seditious, thirdly strictness of the provision forces court to be soft. Which one was the real reason we can only surmise at this point of discussion, we will get the answer to this question in due course.

Queen Empress v Bal Gangadhar Tilak. Accused authored an article in a newspaper giving an example of great Maratha warrior “Vir Shivaji” to overthrow British rule in India. Justice Starchy Interpreted Disaffection includes hatred, enmity, hostility, contempt, ill will, disloyalty men exciting any one of these or attempting shall be guilty of sedition irrespective of amount or intensity of disaffection. It is also immaterial whether impugned material actually incites disaffection or not. The literal interpretation given by the Bombay high court got approval by the legislature, by adding disloyalty and a feeling of enmity.

Subsequently, in *Queen Empress v Amba Prasad* the interpretation given in the Balgangadhar case was approved by Allahabad High Court it was also elucidated that every act of disapprobation does not amount to disaffection under sec. 124A except the person accused under this section is faithful by heart and ready to support and obey the government. This manifests that courts will be reluctant to punish the accused if by other means he establishes his loyalty towards the government. The Court further establishes actual disturbance, mutiny, forcible resistance or rebellion is not necessary under sec. 124A.

Kamal Kishore Sircar v Emperor Calcutta High Court Held that speech condemning government legislation is not seditious, punishing such speech will certainly suppress speech and expression.

Federal Court in *Niharendu Dutt Majumdar v the King Emperor* rejected literal Interpretation given in the Bal Gangadhar case and held a speech does not lead to public disorder or reasonable anticipation of the same or likelihood of it cannot be covered under sedition.

Privy Council in *King Emperor v Sadasiv Narayan Bhalerao* rejected federal court decision and interpretation given in the Balgangadhar case was reaffirmed.

Itinerary for interpreting sec. 124A in the pre-independence era was just like a roller-coaster ride. The Federal court considering changes that occurred worldwide in the favor of Freedom of Speech construed that public disorder or anticipation of the same is imperative for sedition. Though Privy council established that mere words may amount to sedition. The assumption that the Federal Court decision in the *Niharendu Dutt Majumdar* case accurately allows Judiciary to add certain words in the provision is the wrong one as this amount encroachment in legislative function by the Judiciary. Privy Council pronouncement in *Sadasiv Naran Bhalersao* case gives us that meaning of sec. 124A which is absolutely un-match to environment prevailing world- wide, where Freedom of expression deemed to be the mother of all freedom accordingly deserves to be respected.

Freedom of Speech under Indian Constitution- We have observed that how the British government use law of sedition to curb freedom fighters and freedom of the press run by them. From JC Bose to BG Tilak and MK

Gandhi all were booked under this provision. After Independence when the Indian constitution was enacted "Freedom of speech" and restriction on it was included under Article 19(1)a and 19(2) respectively. Constituent assembly debates reveal there was a ruckus on the inclusion of Sedition as the restriction on Freedom of speech. Shri K M Munshi participating in debate expressed that government feels a need for the law of sedition when the government and its law are not accepted and obeyed and anarchy prevails. Public disorder or reasonable anticipation and or likelihood of the public order is the gist of the offence. Shri M A Ayyangar also added, its people's fundamental right to uproot government without violence, sedition ought to be deleted unless uprooting of government by use of force. Word sedition was removed from the Article (Draft) recognizing the sentiments of members.

Post constitutional Judicial Interpretation of Sec.124A- Sedition could not get a place in the constitution as restrictions on Freedom of speech but it continues under The Indian Penal Code. We have already observed that how in USA Courts by developing various doctrines has ensured freedom of speech to prevail over sedition. Now we will examine whether the Indian Judiciary also works in the same line.

Supreme Court in the *Romesh Thapar v Union of India* case got the first opportunity to scrutinize the validity of sec. 124 so long Freedom of speech and expression threaten the security of or tend to overthrow the state, any law restricting the same would not fall within the purview of Article 19 (2).

Punjab High Court in *Tara Singh Gopi Chand v the state* held to be unconstitutional and remarked Law of sedition was relevant under the foreign regime and has become Inappropriate now.

Taking a clue from these two decisions constituent assembly added two additional ground of restriction on Freedom of speech, to protect sec.124A to be declared unconstitutional in future.

While participating in the debate then Prime Minister Pt. Jawahar Lal Nehru underlined the need to get rid of the Law of Sedition as earliest as possible or to limit its scope.

Justice Fazal Ali has their own opinion of not inserting sedition in Art. 19(2) According to him Public disorder are much wider to include sedition. The serious and grave public disorder might affect the security of the public as well as the state.

Soon Supreme Court got the opportunity to reconsider the constitutionality of Sec.124 A in *Kedar Nath v State of Bihar* Court differentiated word 'Government established by the law' and the person for the time being in administration, contempt, hatred and disaffection against the previous one is punishable but not against latter one. Further court recognized the need of protecting freedom of speech "A citizen has right to say whatsoever he likes about government". So long words do not incite violence or have a tendency to create public disorder it is not punishable under sec.124A. the meaning given in this case is in line with *Niharendu*

Dutt Majumdar v the king Emperor and Opinion expressed in Constituent Assembly by Shri K M Munshi and Shri M A Ayyangar.

It is submitted that opinion of two members of the house cannot be regarded as of house, moreover, that opinion is not of a legal expert on whom the court can rely. *Niharendu Dutt Majumdar v the king Emperor* also gave interpretation assuming certain words which are not visible in bare provision. The interpretation given in this case is also similar to the *Balgangadhar* case.

The *Kedarnath* case was reaffirmed in a catena of cases, and its standing without being overruled so far has strongly established that reasoning, the meaning of 124A given is appropriate. This position has led Supreme Court to give the direction in *Common cause v Union of India* to authorities to function in the light of meaning given the *Kedarnath* case. It is submitted that, the direction given by Supreme Court is completely in ignorance of the fact that after the *Kedarnath* case Article 19(2) has been further amended by the legislature to add words "Sovereignty and Integrity of India" Now to uphold constitutionality of sec.124 A we need not interpret it under public disorder, any words or visible representation, which endanger the sovereignty and integrity of India may be punishable irrespective of the fact whether it leads to public disorder or use of force, violence.

Freedom of speech and sedition- In a democracy free flow of information, opinion is necessary for good governance, people need not to be in constant fear. On this pretext in many cases accused booked under 124A have been absolved by the court. *Khalistan Zindabad*, *Hun Mauka aya Hain Raj karan da* was held not punishable on the reason that raising of lonesome slogans by two individuals do not constitute any threat to the Government of India. Accordingly Criticism of the prime minister drawing inferences from his speeches that he is against a particular community is not sedition. *Sanskar Maratha v State of Maharashtra* Court distinguish between strong criticism and disloyalty to government, to absolve a cartoonist from sedition charges. Criticism of Judgment of Supreme court is merely fair criticism not sedition

Post Independence approach of the Judiciary is to narrow down the scope of 124 A to promote freedom of speech. There had been individual's unsuccessful efforts to improve Law of sedition by introducing private member bills According to them, only those words which directly result in violence or incitement to violence must be covered under sedition.

Rejection of these bills by the house and two amendments in Article 19(2) shows that Legislature is not willing to delete sedition from the law book. Though, members of the constituent assembly, including Pt. J.L Nehru, were in favor of the earliest deletion of the provision.

Latest petition challenging Constitutionality of Sec.124 A petitioner raised various questions in Front of the supreme court about the constitutionality of sec.124A.

- Petitioner pleads that; the *Kedarnath* case should be reconsidered. There is no doubt in the last sixty years plenty of things has changed Indian democracy has become mature enough, we require a fresh

Interpretation in the light of subsequent amendment in Art.19(2) is long due.

- Petitioner also argues that criminal liability under 124 A must be imposed only for the intentional, act. This argument is completely based on the wrong notion because in the present form no word in Section 124A can be interpreted to hold intention as an integral part of the section. It is also apparent from the suggestion made by the law commission to include an intention for criminality. This can be done only by the legislature not by the Judiciary as their function is limited to interpretation not to legislate. This plea is wrong because made before the wrong forum.
- Petitioner further claim that 124A is apparently in violation of Art.19 against claim Authors opinion is in the light of the 16th constitutional amendment by which sovereignty and integrity have been added in Art.19(2) this preposition also fails.
- Petitioner also pleads that criminal liability for sedition must co-exist with violence or public disorder, the counter plea is this meaning was given in the case when words Sovereignty and Integrity were not ground of restriction on the freedom of expression. Words irrespective of violence and public disorder should be punishable if they endanger Sovereignty and Integrity. There may be cases where Sovereignty and Integrity of the state is being challenged by the words without resorting to violence and *Kedarnath* public disorder.
- Petitioner also further argues that sec. 124A has been misused for political motives counter argument for that is this cannot be ground for holding that provision does not serve the purpose for which it got a place in IPC.
- Another argument is that Sedition has lost its relevance, as the purpose of it was to protect British colonial power of intention it is submitted that in recent past terrorist activities and insurgency in various parts of the country is on the rise. In urban areas(areas free from terrorists, insurgents) thoughts detrimental to the sovereignty and integrity of India, supporting terrorists or insurgents are being circulated. Such practices are required to be discouraged for which Sec. 124 A is a very effective instrument.
- The further plea is with the passage of time various other laws came in existence which reduces sec.124 of IPC redundant. Such as Unlawful Activities (Prevention) Act (ACT NO.37 of 1969); National Security Act (Act No. 6 of 1978); Public Safety Act (Act No. VI of 1978) and many other which serves the same purpose as of section 124A of IPC. Counter plea for the same is the existence of the similar provision in other statutes cannot be the reason for declaring

it unconstitutional, moreover passing various other statutes from time to time shows legislature has felt the need for such provision.

- It was also pleaded that India under an international obligation under ICCPR which provides the Right to hold opinions, Right to seek information it is submitted that in the light of *ADM Jabalpur* case one can't plead constitutionality of any law on the ground that it violates International law. International law can be helpful only when there is a lacuna in domestic law or consistent with domestic law.
- At last, it is pleaded that country Like UK, New Zealand, Ghana, Uganda, Nigeria has already removed sedition from law books, Counter plea is every country has its requirement, the decision of one country cannot be imposed on other. Moreover, only five countries out of 200 have been named, 195 countries choose to continue with sedition.

The UK abolish sedition in the year 2009 then Parliamentary Under-Secretary of State at the Ministry of Justice of the United Kingdom reasoned that “The existence of these obsolete offences in this country had been used by the other countries as justification of retention of similar law have been used to suppress political dissent. Abolishing these offences will allow the UK to take a lead in challenging a similar law in other countries”. This statement reveals the sinister motive of the UK which has abolished sedition so that it may set an example for other countries and further making it ground to interfere in legislative functions of other countries, this can never be the purpose of India. Even Countries like Australia, Canada which have accepted the suzerainty of the Crown of the UK are reluctant to delete sedition law.

- At last, the petitioner resort to the vagueness of the provision and mentions cases in support. Supreme court held in these cases that on the ground of vagueness provision of the law can be declared void.

In the light of the above discussion, we can conclude that the present petition and the present scenario do not demand declaring section 124A unconstitutional. Other questions arise that should we retain the provision in its current form or some amendment is the requirement of time.

Misuse of sedition there are a plethora of cases where innocent persons have been booked for sedition. Whether the law of sedition is being misused for achieving political motive for this purpose we consider the National Crime Record Bureau report of 2019

Pending from previous year	Newly Reported	Reopened	Total cases investigated	Ended on final report	Cases ended as mistake of fact or law or civil dispute	Cases true but insufficient Evidence	Charge sheet file	Total cases disposed of by police
135	93	1	229	2	6	21	40	70

Sedition Cases Data 2019

This data reveals that in the year 2019 total No. of cases in which

Cases pending investigation	Pending percentage	Charge sheet Submitted out of cases previous year	Charge sheet submitted out of cases during 2019	Charge sheet rate	Cases Convicted	Cases acquitted	Cases in which trial completed
159	69.4	11	29	57.1	1	29	30
Cases in which trial completed	Cases pending trial	Pending %	Conviction rate	Person arrested	Person charge sheeted	Person convicted	Person Acquitted
30	86	74.1	3.3	96	76	2	29

sedition charges were reported were 93 and 131 were of previous years. Overall 229 cases were investigated involving sedition charges. Out of which in 159 cases (ie almost 70%), at the end of the year investigation was still pending. A high no of cases and % in pending of investigation reveal implicated and arrested person in these cases reveal the trauma of being implicated in sedition cases prolonged for them. Especially in cases where the innocent person for achieving political motive or just to spread feeling that criticism of government policy or administration, shall be treated accordingly. Further data related to cases in which charge sheet submitted are merely 29 just one-third of the total cases reported. More astonishingly only in 11 cases out of 135 reported last year's charge sheet was filed. The total cases in which the charge sheet was filled is 41 only but only 30 cases trial could be completed. The complete picture comes when we find only 1 out of 30 cases converted into conviction and the rest 29 were acquitted. The total number of sedition cases is on the rise as in 2017 it was 51 cases in 2018 it raises to 70 and in 2019 reaches 93. This data shows there are chances that this provision can be misused. This led to the conclusion that some protections are necessary.

Safeguards recommended law commission of India has suggested the following amendment in sec.124A. To make it more effective from a government perspective as well as safe from people's perspectives.

- Incorporation of *mens rea* in section to prevent innocent persons.
- Scope of the section should be widened incorporating Constitution of India, Legislatures and administration of justice against whom disaffection not to be tolerated.
- The gap between imprisonment for life and imprisonment of three years or fine should be abridged by fixing seven years of Maximum punishment.

However, these recommendations were not executed by the government. In its subsequent report Commission recommended that to qualify sedition, the impugned expression must threaten sovereignty and integrity or security of the state.

It is submitted that introduction of *mens rea* will certainly prevent misuse. Further introduction of threatening to sovereignty and integrity or security in place of ambiguous term disaffection will also reduce the possibility of wrong use of sec.124 A. In the current situation when India is facing not only big challenges both external and internal one deletion of 124A may be detrimental to state security and sovereignty and integrity. We conclude with CJ Sinha's statement in the *Kedarnath* case Every state

whatsoever is the form of government must be armed with the power to punish those who by their conduct jeopardizes safety and stability and disseminate feelings of disloyalty having tendency to lead to disruption and disorder.

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Religious Consciousness in the poetry of Emily Dickinson

• **Sudhir Kumar Tiwari**

Abstract- *Emily Dickinson was not religious in the conventional sense of the term as well as she was against orthodox religious trends of her time, in spite of the fact that her family members were Puritans. Dickinson adopts diverse attitude to God. She sees God in nature and all his wonderful, natural creations. But her views of God were still full of religious veneration. Emily Dickinson never becomes the member of church, but she struggled hard with the orthodox teaching of the time and boldly attempted to overcome them. Though she was never able to do so. Hence the religion that her family believed in could not get Emily's consent. She rejected the religious doctrines of the times as they were, but she was never free from a religion of her own life.*

Keywords- *The Recluse, orthodox, puritans, Calvinistic, revelation, revivals, metaphysical*

Introduction- Emily Dickinson who is popularly known as 'the Recluse of Amherst', in undisputedly considered as one of the greatest women poets writing in English language. She has left behind more than hundred poems of varying length and form dealing with a variety of subjects. But her poems concerning Life, Death, Eternity, Immortality, God, Man, Love, etc. deserve special notice and consideration.

Emily Dickinson was not religious in the conventional sense of the term. She was rather a sort of stoic philosopher who developed personal covenants with metaphysical matters. As a poet, Emily Dickinson was deeply concerned with the perception of Truth, "My country is truth, I like truth." But this is concerned more with the realm of the spirit rather than the realm of this material world. Therefore, she withdrew from the life of external truth to a secluded life here she could know and observe the real 'truth' of human life.

But along with her pursuit of truth, we notice a metaphysical vein which makes her deal with the unanswerable questions of the world, such as the impermanence of the material world, the immanence of Death and universality of Revelation. In more than six hundred poems, she deals with the theme of Death in an amazingly philosophical manner.

Emily Dickinson was against orthodox religious trends of her time, in spite of the fact that her family members were staunch Puritans. Sometimes, she even mocked at the hard-religious attitude of her father. But it does not mean that she was totally devoid of religious sensibility. She was born and brought up in Puritan family background and reared in an orthodox tradition where Biblical truths were stated in Calvinistic philosophy, which enforced the belief that God directed all human act and predestined the course of men's

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life. About the significance of her religious background, Thomas H. Johnson has rightly observed, "The person that Emily Dickinson became and the poetry that she wrote can be understood only within the context of Valley traditions which she inherited and the dynasty into which she was born. During the years that Hawthorne was memorializing the inescapable Puritan past, she was exemplifying it in quiet drama of life." In Emily's Amherst religious belief were not rigidly enforced. People were free enough to declare their own leaning and beliefs concerning religion. But Emily Dickinson could not do even that and went beyond the normal limits by refusing to attend the church. She did not enroll herself as a member of the church. Instead she decided not to accept the harsh dogmas of innate depravity, arbitrary election and predestination or treat the Bible as true history and the only moral guide for men.

But her view of God was still full of religious veneration. Despite her mocking remarks towards most of religious matters, her feeling towards God and religion were genuine and sincere. She believed in the existence of an all-pervading God. She spoke of God's existence in definite terms. As a result, a large number of her poems have either religious language. There is a note of religiosity running through most of them.

Emily Dickinson never became the member of Church. She struggled hard with the orthodox teachings of the time and boldly attempted to overcome them though she never was able to do so. In one of her letters, Emily Dickinson wrote, "Faith is doubt."¹ The poetess was born in a Christian family. At very early age, she learnt about religion from her family. But she never made her declaration of faith. Her parents' view about religion could not convince her of its soundness. "During 1840s and 1850s Amherst witness significant religious 'revivals', outpourings of evangelical piety that summoned Christians to submit to faith through conversion. Alone among the members of her family, Emily Dickinson turned away from these religious injunctions, and gradually she stopped attending the church altogether."² What impressed her about their 'religion' was, as she thought, that they only "address an Eclipse, every morning - whom they call their 'Father'."³ Hence the religion that her family believed in could not get Emily's approval. She rejected the religious doctrines of the times as they were, but she was never free from a religion of her own. In fact, she had an ambivalent attitude towards religion.

Emily Dickinson was born in a Puritan family. Obviously, there is a very strong influence of Puritan upbringing upon her. David Higgins rightly observes, "The person that Emily Dickinson became and the poetry that she wrote can be understood only within the context of the valley tradition which she inherited and the dynasty into which she was born"⁴ In fact the town had deep roots in Calvinist doctrine dating back six generations to the period from 1672 to 1729 when 'Pope' Solomon Stoddard ruled the whole Hampshire district with autocratic power. As Paul J. Fierlazzo observes, "The emotionalism stirred by his revival harvests, along with the stern orthodoxy of his successor, his grandson Jonathan Edwards, helped to form a staunch culture in the Valley's little villages. As for the churches in Amherst at on Sundays and with daily Bible reading encouraged at home. Sermons stressed man's depravity, the necessity of conversion, the

imminence of death, and God's wrath. Although Emily Dickinson rejected the mournful dogmas of Calvinism, she lived in a community preoccupied with Calvinist eschatology.⁵

In her early years, she tried to understand the 'religion in larger terms. Therefore, Emily Dickinson never joined her family's Church. As her biographer Richard B. Sewall has observed, 'No fewer than eight revivals swept Amherst, collage and town, during her formative years, roughly between 1840 and 1862. She could never see herself as a sinner in the pious friends did, to that direct visitation of the Spirit which was essential to membership in church.'⁶

The religious atmosphere of Amherst in the 1850s did not provide the kind of experience Emily Dickinson was seeking. Her letters of 1850 make the distinction between the tranquility, the gentleness, the kindness of her friends who have answered Christ's call, "on whom change has passed," and her own more intense feeling. In a letter to Jane Humphrey, the same in which she differentiates herself from her friends who have professed Christ—"I am standing alone in rebellion."—she describes in terms of temptation and seduction, the feelings evoked by some unrecorded romantic attachment. In the passage of this letter there is seen a contrast between the poetess's romantic intensity and "A rapid sweetness and piety."

"I dared to do strange things – bold things and have asked to advice from any – I have heeded beautiful tempters, yet do not think I am wrong.I could make you tremble for me. And be very much afraid and wonder how things would end.an experience bitter, and sweet, but the sweet did so beguile me.nobody thinks of the joy. Nobody guesses it, to all appearance old things are engrossing and new ones are not revealed."⁷ No doubt, in refusing to become the member of the church, she thought that she had brought upon herself a suffering, which by virtue of her integrity, she could not avoid. At a later stage, she recalled this suffering in the following poem,

I shall not murmur if at last
The once I loved below
Permission have to understand
For what I have shunned them so –
Divulging it would rest my heart
But it would ravage theirs—
Why, Katie. Treason has a voice—
But mine – dispels – in tears.

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**Philosophical Perspective in
Rabindranath Tagor's Poetry: A Literary Review**

• Jyotshna Mishra
•• Shubha Tiwari

Abstract- *This paper reflects a perspective about Rabindranath Tagor as an Indian modern philosopher. Tagor's philosophy and its connection with Indian literature is so broad and dynamic. The great philosopher Tagor is famous as 'Gurudev'. While dealing at the contribution of Tagor as philosopher, it is clear that he had done a lot in this realm as a thinker, as a poet, as an educationalist and as a social reformer. He visualized that philosophy should ensure a society free from, creed, cast, gender, colour and set equality among all sections of society. It can be seen in the all compositions of Tagor that explored a feeling of harmony and universal equality. Tagor's composition's about philosophy concerns to his perspective of life which influenced him to love for literature, love for humanity, love for nation and love for nature and much more.*

Keywords- *Literature, Philosophy, Harmony and Emotion etc*

Introduction- The beginning of Tagor's perspective on literature and philosophy was his own family where he had experienced with it. His brothers and sisters were novelists, playwrights, poets and musicians so Tagor's family was filled with the literary and musical pursuits. He considered family as a inspiring medium of the spiritual and philosophical agency of the child's development. Family creates a healthy influence upon the mind, body and heart of any person. Under the familiar and healthy environment, a person can find a natural ideology and great chance for development. He concern that philosophy of life should be according to realities of life. Any education cut away from life is useless.

He believed in harmony between philosophy and literature with surroundings of spirituality. Tagor concerned that philosophy and literature should be capable to come out as a harmonious individual in tune with his social set of life. The highest philosophy is that which does not merely give us knowledge but creates our life in harmony with all existence. Tagor was not in favour of mere reading any literary composition. He asserted that literature should promote creative philosophy and self expression. Books can promote through subjects of life crafts, dramatic, drawing, music and much more. "The environment of freedom given to the learner and then creating situations for him will automatically make the learner to do something original." (Rabindranath Tagor. *Creative Unity*, 2008, P. No. 68).

Poetry and music was the strongest desire and passion for Tagor. He explored the philosophy through poetry and musical notes. He was a

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founder, of a new style in music which is called Rabindra Sageet' Though music, poetry, philosophy and painting were Tagor's major interest and occupations but Tagor contributed with equal interest in social activities of his time,. He was always aware for his responsibilities for humanity and for his nation. His philosophy and outlook was liberal in the matter of policy. He said that the democracy is the best for any nation after freedom. He has written about democracy that "In the political life of modern age the idea of democracy has given mankind faith in the individual. It gives each man trust in his own possibilities and pride in his humanity." (N.B. Sen, *Wit and Wisdom of Tagor*, 1968, P.No. 90).

Tagor always concerned with the equality of Indian Women. He was a strong upholder of the rights of women. He asserted that the contribution of women is necessary for the cultural and intellectual growth of any nation. He says, "The further we banish women from us, and smaller the place we give them in our lives, the weaker does our manhood become." (N.B. Sen, *Wit and Wisdom of Tagor*, 1968, P. No. 217).

Tagor was follower of ancient Indian wisdom and was thoroughly admired by philosophies of 'Bhagvada Gita' and 'Upnishad'. He has rewritten many aphorism of the Bhagavada Gita' where Lord Krishna has explored himself above and beyond every day activities. Tagor thought that this aeration did not mean that men should perform lazy and worthless life; rather he should lead in all the activities without the longing of reward. He reflected his view on this in his philosophical essay 'Sadhha,' "Deed are better, however cruel they may be, than the hell of thinking and doubting. So long as the purpose remains in the mind it looms large and fearful. In action it becomes pleasant and easy. Just as the vapor is dark and diffused but when it dissolves into water-drops it becomes refreshing and sparkling." (N.B. Sen, *Wit and Wisdom of Tagor*, 1968, P. No. 33).

Tagor was a philosopher of peace not conflicts. He asserted for a simple and pure life, a clean heart and a clear philosophical perspective of harmony with the whole world. His philosophy enlightens the mind and his ideology of life moves the heart. His songs provoke a new faith into the heart. His all compositions provide a full pleasure for the whole of man's being. In Tagor's philosophy the finite and the infinite are connected. He explored that finite is like a lamp without light and infinite is a meaningless abstraction. Both are related to the world as a singer to the same song. The finite and infinite are related each other to completing their existence.

Philosophy and literature seem to belong to different fields. Philosophy is associated with inner consciousness of human with mind and should as well as literature is related to various written compositions, and philosophical quest for meaning whereas literature may be delineated as a written records of philosophy. Yet philosophy and literature have been visibly drawing closer to each other through literary exchanges and through various philosophical practices. This concept gives writer a new focus by uniting efforts of philosophy and literature. Concern for literary balances are not simply of pragmatic interest, it also need a distinct philosophical efforts.

Tagor's philosophy is generally based upon the morality. Moral

value is a significant quality for humanity. To him 'morality' and 'religion' mean 'nature' and this nature can not be attained by practice. Human has two types of nature. One is for himself and other is for universal man. It is said in the 'Manusher Dharma' that, "Men generally deal with the pleasant and good. Those who are engaged in getting pleasant are always divided and those who adopt good are always appreciated in the society." (<http://14.139.211.59/bitstream.com>).

Tagor's philosophy was the practical portrait of his own perspective. He was an exceptionally devoted, hard working and literary person. He was basically an humanitarian at soul and conceived humanity as a unity. He never trusted in the caste and religion. He never believed that determinism which is part and parcel of Indian tradition, he was a great upholder of freedom of will. He advocated that man is free from both in action and thought. In his *Geetanjali*, he asserted the trivial activities of leisure class in the following lines. O, give up your Idol worship and leisured meditations. Whom you are looking for in this silent dark corner of the shrine? Your God is not here, He is there where the peasant is ploughing his land, where a labourer is breaking stone to make road. God lives with the masses in scene and rain. (Rabindra Nath Tagor, *Gitanjali*, www.kripalsing.org>Tagor).

Tagor's philosophy was mellow and soft and its universal appeal and ideology lies in its soothing tranquil effect. He explored his perspective throughout his literature and his compositions is the reflection on this belief. Tagor's name soon crossed the boundaries of nation. His compositions were translated in major and civilized languages of world. Famous English poet W.B. Yeats translated his poetic genius '*Gitanjali*' into English. This masterpiece of Tagor's Won Nobel Prize for Literature in 1913.

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Online Teaching: A Challenge for Teachers and Students

• Poonam P. Joshi

Abstract- *There has been a technological transformation in the field of education. E-learning is gaining momentum day by day. In such a technology-driven scenario, online teaching has become a challenge for the teachers. In this digital era, the coming generations are quite adept at handling, managing and working with technology. Even the younger kids and toddlers are able to operate the smart phones and other modern gadgets. Thus, these gadgets have been embedded with the daily routine of the modern lives. The paper aims to describe the challenges faced by teachers as well as students on online classes in the present context.*

Keywords- *online, Information and Communication Technology, technological transformation, teachers and students*

Introduction- Recently technology has crossed the threshold in every field of life. It has changed our lifestyle. This revolution has intensely entered in the field of education too. Education has undergone a revolution in the era of Information and Communication Technology. The use of smart boards, hybrid or blended learning, flipped classrooms and digital libraries has become a part of teaching learning process. Due to this, most of the teaching and learning method in the classrooms is changing from traditional style to techno style where students play an active role. To handle this change, the role of a teacher becomes more challenging and consequently requires attention. The aim of this paper is focussed on challenges for teachers as well as students on online classes.

Online Teaching – A Challenge for Teachers and Students: Nowadays, online education has grown rapidly. In near future the faculty and students will be engaged in online teaching learning process in their career. From economic point of view, the higher education institutions and students can take advantage of studying online. From an institutional point of view, online learning is reasonable to increase student enrolment and profits without investments of infrastructure.

Online Learning can be defined as “A course where most or all of the content is delivered online. Typically have no face-to-face meetings” (Allen & Seaman, 2003, 6). As there is no need for physical presence in the classroom, online learning has is possible to a much larger population. According to Johnson and Aragon (2003) an effective online learning environment requires a combination of the following seven principles:

1. Address individual differences,
2. Motivate the student,

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3. Avoid information overload,
4. Create a real-life context,
5. Encourage social interaction,
6. Provide hands-on activities,
7. Encourage student reflection (Johnson and Aragon, 2003, 34)

They think that students differ in their ability to process and apply information and the above characteristics will help them to learn efficiently.

Advantages of online teaching:

Work from anywhere- Unlike in the traditional classroom, the teacher manages to convey their knowledge without being present at the same place. This means teachers can work from anywhere. This means that the student can attend the classes from anywhere in the world and at any time, as long as they have access to the internet. Online classes can be attended by several people at the same time. Therefore, the content taught by online teachers can reach to broader people as compare to face-to-face teaching. It is even possible to record the lessons and then make them available on a digital platform.

Anyone can teach online- To become a face-to-face teacher, you need a certificate in a specific subject, such as language, social sciences, law, and so on. It is necessary to specialise in a specific area. But if for example you have skills in crafts, cooking or music, you can create your online course and teach online without a teaching degree. You can share your knowledge in a self-motivated and clear way on the internet. The most important thing is that you must be master in the topic, so that you can create a course and actually enjoy teaching it.

Creating varied content- The role of online teacher is to attract the attention of those who are watching their classes so that the person sees all the content from beginning to end. In addition crafting eye-catching videos, with interesting and well-explained information, the teacher can develop different types of materials for the students, mainly with the support of educational technologies.

Possibility of making improvements- In a traditional classroom, there is a schedule and a class plan that needs to be followed, so it's quite difficult to change the method or what is going to be taught, especially during class. Every teacher has the duty to keep on studying and remain up-to-date with teaching techniques. The difference here is that with online classes, these improvements can be applied when the teacher receives the feedback. If you want to direct the learning experience, online classes follow a schedule. But those who create content for online courses can always modify something if they realize that the material provided is not so complete and attractive as it could be for students.

Challenges in Front of Teachers- In any teaching learning process, a learner is at the centre and a teacher plays a key role to make a subject easier to learn. In this digital era, a teacher has urged many challenges and responsibilities in addition to his/her prior role to keep pace with the changing technologies and changing teaching learning environments. In online teaching, teachers are facing new challenges which are as follows-

Reliable access to technology- Before preparing for online classes it is necessary to assess whether students can appear on online classes for the reason that in every home reliable internet connection or devices for students to use may not be available. At initial stage email and message to parents can solve these issues so that teacher can prepare to accommodate such students ahead of time.

Arousing students' interest- The classes should be made interesting to the students so that they desire to continue learning. In online class the teacher is not able to know what actually the students are doing. There are distractions on the part of the students which the teacher is unaware. For this it is necessary to create well-structured, interesting lessons to keep students' focus on the content. If teachers create an effective online learning environment, it will lead students' interest towards learning. Students will become actively involved in the course.

Develop activities- Creating activities is one way to make the class interesting and to know whether the student have understood the topic and to find out which point to revise. This is because, when assessing students' responses, the teacher can understand which questions haven't been answered yet and can think in that direction. So it's important to construct some evaluation system.

Diverse Students- Students have now got access to internet. As a result, students have become more knowledgeable, more competitive and thus more demanding from their teachers. It has changed the way in which students understand any concept. Therefore, it is important to find out the types of learners enrolled in the online course in order to design the appropriate interaction system.

Mode of Communications Skills- In traditional communication skills like of reading, speaking and writing are rational and clear. Now there is a need to add social media communication skills. These skills include ability to create a short YouTube video, conducting Webinars, creating online digital library, preparing online documents, the ability to reach out through the internet to a wide community of people with one's ideas, to share information appropriately, to give and take feedback. Teachers have to add his/her knowledge beyond limits with effective communication skills.

Positive Attitude- Teachers should develop a positive attitude towards online teaching. Teacher should not take online class as an obstacle rather think it as an innovative teaching process. Teachers should have will power, strong determination and the positive approach towards becoming techno-friendly and see that its execution has made the learning process more interesting, diverse, comfortable and also suitable.

Feedback- All online learning requires timely feedback. Feedback in the form of assignment, quiz short paper will help the students to keep on track with deadlines. The teacher can send messages and reminders throughout the semester to keep students connected to the course. To help students attain their goals, the teacher should create a structure that is based on learning, exploring, watching and applying technique. This will prepare students what they have to do from time to time. In this structure they will read their

textbook, learn by PowerPoint, watch related videos or explore websites, and apply what they have learned in various methods. In other words thoughtful writing assignments should be given to the students. In reflective writing students do more than just accumulate information. They will try to understand what they are learning.

Challenges of the Students- As this concept is new to the teacher in the same way it is new to the students. For students there are following challenges-

Readiness to accept the change- Online learning is new to the students as well as to the teachers. Students need to make adjustments to their studying habits in order to be successful as online learners. Faculties have reported the lack of student discipline as a main barrier to online learning. As teachers give up some of their control over instructional events, students must be willing to accept some of the responsibilities assumed by teachers. Many students are not prepared for online learning method, which may in part account for high obliteration levels online learning (Henke & Russum, 2000). As Dawley noted, often, they have been educated through years of skills and drill where an emphasis was placed on memorization and testing of knowledge. After many years of working with this transmission model of teaching, students, become comfortable with the process. They understand what is expected of them as passive learners, and they developed skills for effectively mastering the content. Cognitive psychologists refer to this process as the automation of procedural knowledge” (Dawley, 2007, p5)

Isolation- Learning from home can be lonely. Without classroom environment and the company of their friends some students can begin to feel a strong sense of isolation that slowly hounds their desire to learn. If the student is inactive some instruction may be missed and could not be collected from friends at that very moment.

Lack of motivation in online learners- One of the major problems of online education is the motivating students to participate in the course. Social networks can be used to increase attention and interaction in online classes. For example, Face book can be used in online education. However it is natural that online teaching will be harder for our students as they are used to classroom teaching to support learning. And at home there are many distractions and expert support isn't always possible.

Findings-

- Online learning should encourage and support a student centered environment.
- Technological issues can be solved by frequently asked questions.
- Critical thinking skills of students will increase.
- Teachers should become techno-friendly and be quite comfortable in using it.
- Proper interaction is possible when the courses are well planned and interaction options are explained.
- Planning prior to the beginning of a course is necessary. Well planned courses allow the student to focus on learning and, thereby, receive the greatest benefit from the course.

- The effectiveness of an online course is also dependent upon the connection between teachers and students.
- It is compulsory for students to participate in the learning process of online classes.
- Clear planning and instruction will minimize confusion and will limit the number of messages and phone calls.
- Proper motivation is needed for online class.
- Feedback plays an important role in online teaching-learning process.
- Online group discussion should be encouraged.

Conclusion- Thus teachers should provide a way to integrate online class and allow students to be active participants in the learning process. Both teachers and students need to be prepared for the changing role that the online teaching-learning has brought. Rational use of online teaching would lead to evolution to the knowledge society in the globalized world and would also create better teaching and learning environment in the society.

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**Is There Any Difference between Government College Teachers
and Non Government College Teachers in the level of Adjustment?**

• Judasiya Poonam D.

Abstract- *The objective of this research study is to identify the Adjustment level in the Government College Teachers and Non Government College Teachers for this research study Teachers were selected out of which on Random basis total 80 Teachers were selected out of which 40 Government College Teachers and 40 Non Government College Teachers. Test were conducted on the basis of Mangal Teacher Adjustment Inventory developed by S.K. Mangal and arithmetic process were done 'T' test applied on both asthmatic figures obtained and then difference of their means were significant at 0.05 result shows Total adjustment level of Non Government College Teachers does not difference significantly from Government College Teachers.*

Keywords- *Teachers, Adjustment.*

Introduction- It is universally agreed upon by all persons who are concerned with social welfare and progress of a country that the teacher plays a crucial role in building of a nation and truly he is called nation builder. Teaching has become increasingly challenging and complex under the present changing situations. One of the various challenges hurled at teachers in the recent past, is of maintaining the physical and mental health of children and youth of the nation. A sound knowledge of Teacher Adjustment process is essential under the present situations. Not only in order to enable a teacher to function well but also, in order to pave the way for a better adjustment and healthy progress of students. Some of the teachers' mode of response to their work place is detrimental to themselves, to society or to both. In the present study researcher tries to find out and compare the adjustment levels of the Government College and Non Government College Teachers.

Statement of the Problem- The Statement of the Problem was, "Is There Any Difference between Government College Teachers and Non Government College Teachers in the level of Adjustment?"

Objectives- The Objective of the Study was, to compare the Adjustment level of Government College Teachers and Non Government College Teachers.

Hypothesis- The Hypothesis of the Study was, there is no Significant Difference between Government College Teachers and Non Government College Teachers in the level of Adjustment.

Variables-

1.	Independent Variable:- Teachers	level 1 : Government College Teacher, Level 2: Non Government College Teacher.
2.	Dependent Variable: -	Score of Adjustment Inventory.
3.	Control Variable :-	Academic Year: - 2021-2022 Area:- Rajkot City Standard:- College Section

Scope of Research- The Scope of Research of the Present Study was Education and Psychology.

Type of Research- The Present Study Applied the Theoretical Knowledge in to practice and therefore it was an applied research. The data collected in the present research was in quantitative form. The data analysis was also done using the statistical techniques and procedure. Thus the present research was a quantitative research according to its implementation form.

Research Method- After reviewing various related studies, objective of the study and the nature of the problem the researcher preferred the descriptive survey for the present study.

Population- In the present study, College Teachers of Rajkot city were selected as a population.

Sample Selection- For Accomplish The study; Randomly Sampling Technique was used to Select the Sample of 80 Teachers (40 from Government College and 40 Non Government College) from Rajkot city. Some College were Selected at Random from the Rajkot city. Then at Second Stage Teachers were Selected at Random from those College and they were given the tool to be completely filled.

Research Tool- In the Present Study Researcher has been used Mangal Teacher Adjustment Inventory developed by S.K. Mangal.

Statistical Analysis- Descriptive Statistic, mean, Standard deviation and independent t-test was used as a Statistical Technique.

Collection of Data- The Necessary data was Collected by Administering the tests for the chosen Components. After taken test whatever the data get was noted by Researcher.

Analysis and Interpretation:-

Null Hypothesis- There is no Significant Difference between Government College Teachers and Non Government College Teachers in the level of Adjustment.

Teachers	N	Mean	S.D.	t-value	Level of Sig.
Government College	40	71.52	7.20	0.94	Not Significant
Non Government College	40	69.80	8.98		

It is evident in the table that the calculated value (0.70) is less than the table value (1.99). And we can say with 38 percent confidence (0.05 level of Significance) that the total adjustment level of Non Government College Teachers does not significantly from Government College Teachers. Null hypothesis is not rejected.

Conclusion- Total adjustment level of Non Government College Teachers does not differ significantly from Government College Teachers.

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**Effect of Selected Yogic Intervention
Strategies on Triglycerides: A Comparative Study**

• Diwakar Pal
•• Hukum Singh

Abstract- *The objective of the present study was to compare the effect of selected yogic intervention strategies on Triglycerides. A total of fifteen sedentary male subjects were selected and used as two experimental groups of five subjects each and one control group of five subjects from Gwalior (M.P.). Suryanamaskar and Pragma yoga were considered as independent variable and Triglycerides was taken as dependent variable. CHOD-PAP method (modified Roeschlau's method) was used for measuring the subjects' Triglycerides. Selected yogic intervention strategies training was given up to one month with five days in week, each session scheduled for forty-five minutes. The pre-test post-test randomized group design was used for this study. Tests were administered before the training program and just after the completion of the training program. **Analysis of variance and analysis of covariance results revealed** that there was insignificant difference of selected yogic intervention strategies on Triglycerides. Hence, we can conclude that more time is required to get improvement in biochemical variables through yogic intervention exercises.*

Keywords- *Suryanamaskar, Pragma Yoga, Triglycerides*

Introduction- Cardiovascular diseases account for high morbidity and mortality all over the world. Countries where the epidemic began early are showing a decline due to major public health interventions. On the other hand, cardiovascular diseases are contributing towards an ever-increasing proportion of the non-communicable diseases in the developing countries (WHO, 2002. Reddy et. al., 2005). Stress, lifestyle changes and dyslipidemia are modifiable risk factors. Behavioral methods are recommended by the national cholesterol education program as the first line of prevention and treatment for hypercholesterolemia and other risk factors (Calderon, 1999). Cholesterol has become a much-feared word these days and people are trying to maintain the normal cholesterol level for which diets and yogic exercises prove to be effective means to reduce.

Now a days, there has been significant uptake of yogic exercises, as a means of maintaining good health. Surya namaskara has been handed down from the enlightened sages of the vedic age. The sun symbolizes spiritual

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consciousness and in ancient times was worshipped on a daily basis. In yoga the sun is represented by pingala or suryanadi, the pranic channel which carries the vital, life giving force (Saraswati, 2002). The practice of Surya Namaskar as a complete and perfect compound blend of body movement, breathing and concentration is used in many Indian schools and ashrams since it was considered by the ancients of India to be a form of kriya (purification), or body oblation, which would give an abundance of health, vitality and spiritual upliftment (Gharote and Ganguly, 2006; Gharote, 2004; Patel, 2004; Bhattacharya, 2007; Stiles, 2007). On the other side, Pragya Yoga is developed by Gurudev, Pt. Shri Ram Sharma Acharya, has pioneered a novel approach to yoga for a healthy and happy life, which is simple and suitable for the masses. He has named it "Pragya Yoga"-under the noble "PragyaAbhiyan" mission. Shantikunj-An Aranyak of our times, which is situated in the lap of the Ganges and under the shadow of the Himalayas, is a centre for learning this comprehensive yoga. This yoga involves all the three bodies (physical, subtle and causal) of a person. There is a series of various Asanas, which is done in a sequential manner (Sharma, 2007). As the Suryanamaskar is a traditional approach in yoga with lots of importance and benefits and Pragya Yoga has developed over the limitation of Suryanamaskar for the beginners as the difficulty in performing the asana, both the package are entirely different. Therefore, the *objective of the present study was to compare the effect of selected yogic intervention strategies on Triglycerides.*

Methodology- A total of fifteen sedentary male individuals with age ranged between 45-55 years from Gwalior, M.P. were selected randomly, which further divided into three groups (two experiment and one control) of five subjects each. All subjects were almost from the same socio- economic group and were found to be physically fit for the type of training programme they were selected. *Suryanamaskar and Pragya yoga were considered as independent variable and Triglycerides was taken as dependent variable. Blood was collected from a stasis free vein and stored in an ice bath. 2ml blood collected in blood plane vial after sterilizing the arm of the subject. For quantitative analysis of blood Triglycerides, commercially available cholesterol kit of Erbamannheim from Transasia Bio-Medicals Ltd. was used. This reagent kit was intended in-vitro quantitative determination of cholesterol in serum and CHOD-PAP method (modified Roeschlau's method) was used for measuring the subjects' Triglycerides.*

In the present study, pre-test post-test randomized group design was used to compare the effect of selected yogic intervention strategies on Triglycerides. The subjects were divided into two experimental group and one control group. The experimental group was imparted five days of selected intervention strategies per week and each session scheduled for forty-five minutes under the supervision and guidance of the scholar. The said experimental training was administered in the Yoga hall of Shri Ram colony, Gwalior and subjects in the experimental groups were practiced Pragya Yoga and Suryanamaskar barefoot. The practice session was

conducted for a period of forty-five minutes in the morning i.e. 8.00 a.m. to 8.45 a.m. from Monday to Friday for the duration of one month. To find out the significance of difference among the groups, descriptive statistics, analysis of variance and analysis of covariance were used. The level of significance was set at 0.05.

Table 01
Descriptive statistics of all the three groups for S. Triglycerides

Groups	Test	Mean	Std. Deviation	N
Pragya yoga	Pre	256.8220	127.50	5
	Post	174.2820	104.83	
Surya namaskar	Pre	154.3160	75.67	5
	Post	125.2660	56.43	
Control group	Pre	84.5060	31.04	5
	Post	129.0240	122.76	

Table 01 revealed that there were five subjects in each group. The mean and standard deviation of Pragya yoga group in pre test and post test were 256.82 ± 127.50 and 174.28 ± 104.83 respectively. The mean and standard deviation of Suryanamaskara group in pre test and post test were 154.31 ± 75.67 and 125.26 ± 56.43 respectively. The mean and standard deviation of control group in pre test and post test were 84.50 ± 31.04 and 129.02 ± 122.76 respectively in S. Triglycerides.

Figure 01
Means of all the three groups for Serum Triglycerides

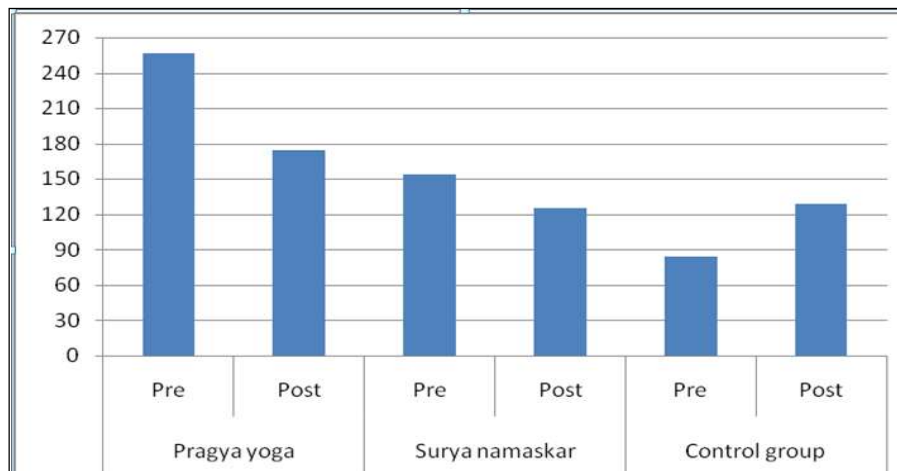


Table 02
Anova table for comparison
of S. Triglycerides among the various groups

	Sources	SS	df	MSS	F	p-value
post	Between Groups	7441.629	2	3720.81	.382	.691
	Within Groups	116978.78	12	9748.23		
	Total	124420.411	14			
pre	Between Groups	75122.867	2	37561.4	4.911	.054
	Within Groups	91789.303	12	7649.10		
	Total	166912.169	14			

Table 02 revealed that the obtained p-value (.691 and .054) was higher than .05 in post test as well as pre test respectively, thus indicating that no significant difference were found among the various groups at .05 level of significance in S. Triglycerides

Table 03
Univariate tests

	SS	Df	MSS	F	Sig.
Contrast	12785.285	2	6392.642	1.204	.337
Error	58405.451	11	5309.586		

Table 03 revealed that the obtained p-value .337 was higher than .05, thus indicating that no significant difference were found among the estimated marginal means of the groups in S. Triglycerides.

Result and Discussion: Table 01 revealed the subject characteristics by descriptive statistics i.e., mean and standard deviation of Pragma yoga group in pre-test and post-test were 256.82 ± 127.50 and 174.28 ± 104.83 respectively. The mean and standard deviation of Suryanamaskara group in pre-test and post-test were 154.31 ± 75.67 and 125.26 ± 56.43 respectively. The mean and standard deviation of control group in pre-test and post-test were 84.50 ± 31.04 and 129.02 ± 122.76 respectively in Triglycerides.

Table 02 revealed that the obtained p-value (0.691 and 0.054) was higher than 0.05 in post-test as well as pre-test respectively, thus indicating significant difference among the various groups at 0.05 level of significance in Triglycerides. Table 3 revealed insignificant difference among the estimated marginal means of the groups in Triglycerides as the p-value is more than the 0.05 ($p > 0.05$).

The present study evaluated the effect of one month selected yogic intervention exercises training on Triglycerides on sedentary male. The findings of this study demonstrate that one month suryanamsakar and pragma yoga training have insignificant effect on Triglycerides. The reason for insignificance might be the small sample size and short yogic training period.

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**An experimental study to assess the effectiveness
of lecture cum demonstration on first aid for selected
Minor injuries among Asha in selected area of Bhopal, (M.P.)**

• Chhaya

Abstract- *In most of the cases, the complications of the injuries and fractures can be reduced by proper application of the first aid in proper time. Lacking of the first aid management at the accidental scene leads to major complications, disability or even death. By considering the importance of first aid it is imperative that every person should be capable of rendering first aid to sick and injured person till the patient reaches in the safe hands of specific medical personal. Findings related to the effectiveness of lecture cum demonstration on first aid for selected minor injuries was found out through paired't test ($t=14.13$) at $p<0.001$. According to the mean there was significant difference between pre test and post test knowledge score, was increased from 8.76 to 14.13 after administering lecture cum demonstration. Finding related to the section wise difference between pre-test and post –test knowledge score, according to mean there was significant section wise difference between pre-test and post –test. In introduction (section-1) knowledge score increased from 1.66 to 2.93. In minor burn (section-2) knowledge score increased from 1.36 to 2.6. In fracture (section-3) knowledge score increased from 1.7-2.8. In sprain or strain (section-4) knowledge score increased from 1.16 to 2.06. In cut/wound/bleeding (section-5) knowledge score increased from 1.46 to 2.2. And in insect bite (section-6) knowledge score increased from 1.4-1.5 after administering the lecture cum demonstration.*

Keywords- *Knowledge, lecture cum demonstration, first aid, minor injuries ASHA*

Introduction- In emergency situation lack of proper first aid can be fatal, better educated we all are, the better prepared we should be to deal with an unexpected illness or injury. A review of Indian studies and observation in 2000 indicated that ratio of deaths from serious injuries needing hospitalizations: and minor injuries as 1:20:50. A basic knowledge and understanding of first aid can be able to provide emergency care in the event of an accident possibly saving lives and minimizing injury. Present study is chosen with the same intention focusing on the ASHA as they are link between the community area and health services.

Objectives of the study-

- ❖ To assess the pretest knowledge regarding first aid for selected minor injuries among ASHA.
- ❖ To provide lecture cum demonstration regarding first aid for selected minor injuries among ASHA.
- ❖ To assess the post test knowledge regarding first aid for selected

minor injuries among ASHA.

- ❖ To assess the effectiveness of lecture cum demonstration on first aid for selected minor injuries among ASHA.
- ❖ To find out the association between knowledge with their socio demographic variables.

Area of the Study- In this study the investigator selected kolar CHC and gandhinagar CHC in Bhopal M.P.

Population- The target population in this study consists of all accredited social health activists (ASHA) from Bhopal M.P. and accessible population consist of ASHA from selected area of Bhopal M.P.

Methodology- Based on the objectives an extensive search of literature was made to determine and develop the conceptual framework and methodology for the study. Pre experimental one group pre testpost test design was adopted to assess the knowledge regarding first aid for selected minor injuries among ASHA in selected area of Bhopal M.P. Non Probability Convenient Sampling Technique was adopted. A structured knowledge questionnaire was developed focusing on first aid for selected minor injuries. The content validity was ensured in consultation with the recommendations and the valuable suggestions of experts. The reliability of the tool was tested and established. Collected data were analyzed by using descriptive and inferential statistics.

Research Design- The research design selected for this study is one group pretest- post test, pre experimental study design.

Sample and sample size- In the present study the sample size is 30 accredited social health activists (ASHA) from selected area of Bhopal M.P., based on the inclusion criteria of the study.

Sampling technique- Non probability convenient sampling technique was used for this study.

Criteria For Selecting The Sample-

❖ **Inclusion criteria**

- ASHA who understand Hindi or English language.
- ASHA who consent to participate in the study.
- ASHA who are present at the time of data collection.

❖ **Exclusion criteria-**

- ASHA who are sick/ill at the time of data collection.
- ASHA those who are not co-operative.

Description of Tools- The questionnaires will be prepared in the two sections,

Section (a)- it deals with the demographic variables consist of baseline information of ASHA including age in year, sex, marital status, education, type of family, duration of work, from where they got knowledge, and past experience related to first aid.

Section (b) - it deals with the knowledge questionnaires regarding first aid for selected minor injuries. The total no. of questions was 24.

Validity of Tool- The prepared instrument along with the statement of the problem, objectives, operational definition, scoring key and criteria

checklist were provided to eight experts for validation. The experts comprise of six nurse educators in the field of community health nursing one expert from the medical department of community medicine, and one statistician for establishing content validity, the tool was modified as per the suggestions of the experts, consulting guide and statistician.

Reliability of the Tool- Reliability of the tool was tested by administering six ASHAs in selected area of Bhopal. Split half method was used which measures the co-efficient of internal consistency. The reliability of the split half test was found by using the kurt person's co-efficient correlation formula. The correlation for the half test was found to be significant ($r_{1/2} = 0.20$).

Ethical Considerations- The issues related to ethical considerations were discussed with institutional ethical committee (IEC) members of people's college of nursing and research Centre (PCN&RC).

Ethical clearance certificate was obtained from IEC of PCNRC, written permission was obtained from concerned authority (chief health medical officer of Bhopal M.P. and chief medical officer of selected areas in Bhopal) and informed consent was obtained from subjects. Subjects' privacy, anonymity and confidentiality of the data were guarded.

An ethical guideline has followed throughout the study.

Pilot Study or Feasibility of The Study- The investigator selected the Gandhinagar CHC area and kolar CHC area of Bhopal. Altogether six ASHAs were selected as respondents by using non probability convenient sampling technique.

Before the conduction of the study, formal permission was obtained from the concerned authority. The purpose of the study was explained and informed consent was taken from those who met the inclusive criteria to participate in the study. The researcher conducted the pilot study from 28/11/2015 to 4/12/2015. The pretest was collected from the samples by using structured knowledge questionnaire for about 20-30 minutes. On the same day lecture cum demonstration was imparted to the participants. The post test was given to the same samples after 7 days. The tool and the samples were found to be suitable and the study was found to be feasible.

Data Collection Procedure- Formal written permission was obtained from the chief health medical officer. The final study was conducted during the month of December 2015, with 30 ASHAs were selected by non probability convenient sampling technique. Prior to data collection the researcher introduce her and explained the purpose of the study. Informed consent was obtained from the subjects and they were assured anonymity and confidentiality of the information provided by them.

Phase I: pre-test was conducted through structured knowledge questionnaire along with adequate explanation for about 20-30 minutes.

Phase II: the researcher imparted the lecture cum demonstration to participants on the same day of data collection.

Phase III: after seven days post test was conducted to the same subjects by using same Structured knowledge questionnaire.

Data Analysis and Interpretation- The plan for data analysis is as follows-

- Organizing data in a master sheet.

- Frequency and percentage distribution of demographic characteristics of samples.
- Chi-square test to establish the association between the knowledge and selected demographic variables.
- Paired t-test to assess the effectiveness of lecture cum demonstration on first aid for selected minor injuries.

Results- Findings related to the socio demographic variables of ASHAs was found that the group majority (40%) of ASHA were in the age group of 27-32 years, (40%) of them were higher secondary pass, majority (73%) belong to joint family, majority (47%), were duration of work in between the 13-18 months, majority (60%) source of information was training, (60%) had past experience.

Findings related to knowledge score of adults regarding first aid for selected minor injuries. It was revealed that in post-test Majority of the ASHAs 57% had average knowledge regarding first aid for selected minor injuries.

Findings related to association between socio demographic variables and the knowledge regarding first aid for selected minor injuries was a significant association between knowledge level and socio demographic variables like age, educational status, type of family, duration of work, source of information and past experience.

Findings related to the effectiveness of lecture cum demonstration on first aid for selected minor injuries was found out through paired't' test ($t=14.13$) at $p<0.001$. According to the mean there was significant difference between pre test and post test knowledge score, was increased from 8.76 to 14.13 after administering lecture cum demonstration.

Finding related to the section wise difference between pre-test and post –test knowledge score, according to mean there was significant section wise difference between pre-test and post –test. In introduction (section-1) knowledge score increased from 1.66 to 2.93. In minor burn (section-2) knowledge score increased from 1.36 to 2.6. In fracture (section-3) knowledge score increased from 1.7-2.8. In sprain or strain (section-4) knowledge score increased from 1.16 to 2.06. In cut/wound/bleeding (section-5) knowledge score increased from 1.46 to 2.2. And in insect bite (section-6) knowledge score increased from 1.4-1.5 after administering the lecture cum demonstration.

Interpretation and Conclusion- On the basis of the findings, the investigator concluded that the lecture cum demonstration is significantly effective on improving the knowledge regarding first aid for selected minor injuries among ASHA. Hence the ASHA should be encouraged to attend lecture cum demonstration programme.

The present study was undertaken to assess the effectiveness of lecture cum demonstration on first aid for selected minor injuries among ASHA in selected area of Bhopal M.P. The data was collected from 30 ASHAs using structured knowledge questionnaire before and after giving lecture cum demonstration. Non- Probability Convenient Sampling technique was used to select the sample of ASHA. The finding of the study have been discussed with reference to the objectives, hypothesis and with

the finding of the studies. The data is organized analyzed through descriptive and inferential statistics. The study revealed following major finding.

- Before the administration of lecture cum demonstration, (0) participants had good knowledge, (16) of the ASHA had average knowledge and (14) had poor knowledge. The pre-test mean score was 8.73 and after the administration of lecture cum demonstration, the post test mean score was showed 14.13.
- The overall mean score of knowledge increased from 8.73 to 14.13.
- The post test mean score of knowledge of 14.13 was comparably more than the pre test mean score of 8.73 and it was found to be statistically significant (t-value=13.3, $p<0.001$) at 0.05 level, that is $p<0.05$.
- The important role of the nurse is to provide awareness regarding knowledge on first aid for selected minor injuries. The nurse plays an important role in reduce and health promotion activities. Lecture cum demonstration was significantly effective in increasing the knowledge of ASHA.

Implications-

- Implication in nursing education
- Implications in nursing practice
- Implication in nursing administration
- Implication in nursing research

Limitations-

The study is limited to-

- This study is only delimited to ASHA.
- The study is delimited to 30 samples.

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A review o

**A comparative study to assess the level of knowledge
And practice on infant feeding among working and non
Working mothers in selected community areas at Bilaspur (c.g.)**

•Akanksha Wani

••Rachna Abraham

•••Shikha Tirkey

Abstract- *Appropriate feeding is crucial for the healthy growth and development of an infant. Children are the wealth of tomorrow. Children always need special care to survive and thrive. Good health of these precious members of the society should be ensured as prime importance in all countries. The department of health and child welfare has recommended exclusive breast feeding for the first 6 months of life with the gradual introduction of solid foods with breast feeding until 2 years of age and beyond. Solids should be introduced for the babies at around 6 months after birth. (FSSAI 2012). Method- A descriptive study was conducted among working and nonworking mothers in selected community areas at Bilaspur, Chhattisgarh during the month of November 2020 to assess the level of knowledge and practice on infant feeding. Findings of the study shows that working mothers had high level of practice and knowledge on infant feeding than non-working mothers.*

Keywords- *knowledge, practice, infant feeding.*

Introduction- Breast milk is the basic food for the infant. Breast feeding is the most natural method for feeding an infant. It provides all the energy nutrients that are needed for the first few months of life, and it continues to provide up to 2 years WHO (1991) define breast feeding as the feed that provides milk to the child either directly from the breast or expressed. Breast feeding should be initiated within the first half an hour after birth. The first milk is most suitable for the new born. It is thick and yellow colored. Breast milk is always fresh, pure, readymade, requiring no preparation. It is also at the right temperature, uncontaminated and aseptic. Human milk is the most appropriate milk for the human infants because it is uniquely adapted to its needs. Weaning is time of nutritional vulnerability; it represents a period of dietary transition just when nutritional requirements for growth and brain developments are high. A nutritionally adequate weaning diet is essential for achieving optimum growth in the first year. Growth in the first year influences both the well-being of the child and long

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term health of the adult. The infants feeding behavior changes from suckling to chewing and biting later on this will changes to independent feeding.

Objectives of the study-

- To assess and compare the level of knowledge of working and nonworking mothers regarding infant feeding.
- To assess and compare the level of practice of working and non-working mothers regarding infant feeding.
- To associate the level of knowledge of working and non-working mothers with the selected demographic variables.
- To associate the level of practice of working and non-working mothers with the selected demographic variables.

Hypothesis-

H1: There will be significant difference between the mean knowledge score of working mothers and non-working mothers on infant feeding.

H2: There will be significant difference between the mean practice score of working mothers and non-working mothers on infant feeding.

Review of Literature- An extensive literature was reviewed on the following headings:

1. Literature related to knowledge of mother on infant feeding.
2. Literature related to practice of mother on infant feeding.

Material and method- Non-experimental descriptive survey research design was used for the study. The study was conducted in selected community area namely Hirrimines Chatauna in Bilaspur (C.G). The study was conducted for 15 days. Samples were selected using Purposive sampling technique. The samples of the study consisted of 60 mothers (30 working mothers and 30 non-working mothers).The data were collected using multiple choice questioners and checklist the tool was organized in 3 sections (Sections A-Demographic characteristics, Sections B-Multiple choice knowledge questions on Infant Feeding. Sections C- Self structured checklist to assess practice on infant feeding).The content validity of the tool was done by 5 experts in the field of Child Health Nursing. The study tool was found to be reliable reliability (by test-retest method). Data analysis and interpretation was done by using descriptive and inferential statistics.

Results-

- **Socio- demographic variables of participants-** Age of study subjects depicts 20 (66.6%), 12 (40%) working and non working mothers belong to age group of 26-29 years, 2(6.66%) non working mothers are in age group of 20-22years, 9(30%),16(53.33%) working and non working mothers belong to age group of 23-25 years of age remaining 1(3.33%)of working mothers are in age group of 30-35 years. In relation to educational status 5(16.66%), 24(80%)working and non working mothers had primary school, 15 (50%), 5(16.6%) working and non working mothers had high school education, 10 (33.33%) of working and 1(3.33%) of non working mothers had higher secondary education. According to family

monthly income 14(46.6%), 18(60%) working and non-working mothers had monthly income between 5000/- to 10,000/-, 11(36.66%) working and 9(30%) of non working mothers had 10,000-20,000/-, 4(13.33%) of working and 1(3.33%) of non working mothers had family income is >20,000/-, 1(3.33%), 2(6.66%) working and non-working mothers have monthly income below 5000/-. According to occupation 14(46.6%) working mothers were in private job and 13(43.3%) of working mothers were in business and 3(10%) working mothers are in govt. job. According to religion 24 (80%), 29 (96.6%) working and non working mothers belongs to Hindu religion, 1(3.33%), 1(3.33%) working and non working mothers belongs to Muslims religion, 5(16.6%), working mothers belongs to Christian religion. According to previous source of knowledge it 23 (76.66%), 19 (63.33%) working and non working mothers had source of previous knowledge through health workers, 5(16.66%), 9(30%) working and non working mothers had source of previous knowledge through media, 1(3.33%), 1(3.33%) working and non working mothers had source of previous knowledge through magazines, 1(3.33%), 1(3.33%) working and non working mothers had source of previous knowledge through news paper

- **Knowledge of working and non working mothers regarding infant feeding.** knowledge regarding infant feeding among working and non working mothers as per criteria was assessed. Findings depicts that 6.7% of working mothers and 3.3% of non-working mothers had poor knowledge on breast feeding. 83.3% of non-working mothers and 90% of working mothers had average knowledge and 10% of working mothers and 6.7% of non-working mothers had good knowledge on breast feeding.(table-1)

Table 01
Frequency and Percentage Distribution of Level of Knowledge of Working and Non-Working Mothers on Infant Feeding

Various aspects	Level of Knowledge	(N=60)			
		Working mothers (N=30)		Non-working mothers (N=30)	
		Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Breast feeding & Weaning	Good	3	10%	2	6.7%
	Average	25	83.33%	27	90%
	Poor	2	6.7%	1	3.33%

- Mean knowledge score and standard deviation of working and non working mothers in various aspects of infant feeding and level of significance- The overall mean knowledge score on infant feeding for working mothers were 10.43 (52.15%) whereas mean knowledge score for non-working mothers were 10.03 (50.15%), 50.15% and SD is 2.4, 2.2 respectively. There is significant difference in overall

mean knowledge score between working and non working mothers on infant feeding “t”=0.67, (P<0.05, df= 58) (Table 2)

Table 02

Mean knowledge score and standard deviation of working and non-working Mother in various aspects of infant feeding and level of Significance

Knowledge	Working Mothers				Non- working mothers				(N=60)
	Max Score	Mean Score	Mean Score%	SD	Max Score	Mean Score	Mean Score %	MD	Un paired 't' Value
Breast Feeding & weaning	20	10.43	52.15%	2.4	10.03	50.1%	2.20	0.4	P<0.05 Df=58 0.67*

- Assess and compare the level of practice of working and non working mothers regarding infant feeding. As per criteria was assessed shows that there is 16% of working mothers and 10% of non-working mothers had average practice on breast feeding. 0% of non-working mothers and 0% of working mothers had poor practice. 83% of non-working mothers and 86% of working mothers had good practice of breast feeding.

TABLE-3

Frequency and percentage distribution of level of practice of working and non-working mothers on infant feeding

Various aspects	Level of Practice	(N= 60)			
		Working mothers (N=30)		Non-working others (N=30)	
		Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Breast Feeding & weaning	Good	25	83.33%	26	86.66%
	Average	5	16.66%	3	10%
	Poor	-	-	-	-

- Mean practice score and standard deviation of working and non-working mothers in various aspects of infant feeding and level of significance. In the working mothers the mean Practice score percentage on breast feeding was 75.5%. Whereas in the non-working mothers the mean Practice score percentage was 74.3%. The mean practice score of the working mothers on breast feeding and weaning was more than non-working mothers. (Table-4)

TABLE 04

Mean practice score and standard deviation of working and non working mothers in various aspects of infant feeding and level of significance.

Knowledge	Working Mothers				Non- working mothers				(N=60)
	Max Score	Mean Score	Mean Score %	SD	Max Score	Mean Score	Mean Score %	MD	Un paired 't' Value
Breast Feeding & weaning	20	15.1	75.5 %	1.75	14.86	74.3 %	1.11	0.24	P<0.05 Df=58 0.81NS*

*Significant. NS-Not significant Table value- 2.02

Association between knowledge score of working and non working mothers with selected demographic variables which was assessed and tabulated in table 1.11 shows that there is a significant association between the age, (17.96, $p < 0.05$, $df = 6$, t value 12.59) religion (27.17, $p < 0.05$, $df = 6$, t value 12.59) and source of previous knowledge (37.17, $p < 0.05$, $df = 6$, t value 12.59) of mothers and the level of knowledge on infant. There was no association between the other demographic characteristics and the knowledge of working and non-working mothers on infant feeding.

Conclusion- The findings of the study concluded that working mothers had high level of practice and knowledge on infant feeding than non working mothers. The findings of the study have implication in nursing education, practice, administration and research. Based on the findings, recommendations are proposed for future research.

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Why Madhya Pradesh is lagging in Fertility Decline?

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Abstract- India has already been witnessing a significant decline in total fertility rate (TFR) over the past 73 years. In this context few states in India like Madhya Pradesh (MP) is not performing the way it should be. Present paper is focusing on various determining factors of gap in fertility rates among the Indian states in general and in MP particular by using data from the different rounds of National Family Health Survey (NFHS). Decomposition analysis of fertility has been employed with the place of residence, caste, education level of women and wealth index. Output of this study indicates that wealth index is one of the dominating factors in the fertility gap between MP and national average while place of residence, caste, education level of women are playing a subordinate role in fertility behavior among the women in selected state.

Keywords- Human fertility, Fertility decline, education, caste, wealth index

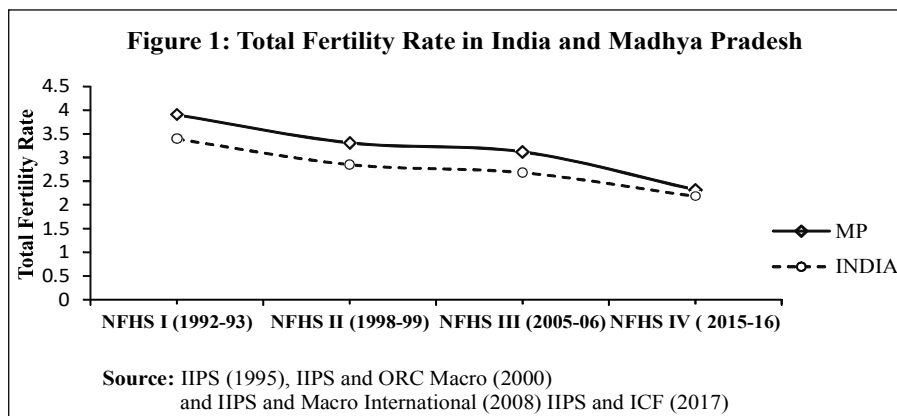
Introduction- Fertility is biological events in the social process among the human society and its rate is not uniform across the country due to various factors. These factors are related to socio-economic, spatial, cultural, political, institutional, psychological state of mind of couple and other. These factors are affecting in majority from level of education and socio-economic status among the women. World community is experiencing fertility in declining trends. Most of the Indian states have achieved fertility at replacement level but still some of the major populated states are far behind from that level of fertility. Madhya Pradesh (MP) is one of the states in India whose fertility is higher as compared to the national average. Being a large country with a second largest population of the world, India presents endless variations in physical and cultural space. Among different regions, Madhya Pradesh is centrally located state with second largest area and is equally diverse in nature with different caste and socio-economic groups. Fertility is one of the essential indicators of demographic change and it is technically referred to as birth rate and it is defined as the overall number of children of a woman or a group of women (Srinivasan, 1998). Fertility has declined from 3.90, 1991-92 to 2.32 in 2015-16 in Madhya Pradesh while for the national level it declined from 3.39 to 2.18 during the same period. There are

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some important and significant variables such as education, income, urbanization, and religion have a great role in fertility decline (Kim, 2014). Women's education is the key factor of fertility of explaining fertility differences over a period of time (Dreze and Murti, 2001). Desire fertility is determined by caste, economic condition, education level (Sahoo, 2014). This paper is an attempt to understand if Madhya Pradesh would have the same condition compared to India then what would have fertility level in the state. This is shown with the help of decomposition analysis of caste, place of residence, education level of women and wealth index.

Level and Trends in Fertility

Trend of fertility is an essential part to understand the fertility transition over a period of time. Fertility has come down in Madhya Pradesh and India from NFHS I to NFHS IV. It has declined by 1.58 points in Madhya Pradesh from 3.9 to 2.32 and NFHS I to NFHS IV in India by 1.21 points from 3.39 to 2.18 during the same periods of time. From NFHS I to NFHS III, pace of fertility decline was faster in the state which has declined by 0.78 point contrary it declined slightly slower, (0.71 points) in the country. In the next round of the survey that was conducted nearly after a decade, fertility was declining in Madhya Pradesh at higher rate as compared to India. To understand the causes of different socioeconomic, demographic and cultural factors decomposition method has been employed. Decomposition of fertility with the different variables have been computed below with caste composition, place of residence (rural-urban), education of women, and wealth index in order to see the causes of fertility differences in Madhya Pradesh and India.



Analysis and Results

Table 1 demonstrates decomposition of fertility with caste in Madhya Pradesh. It reveals the causes of difference in fertility between Madhya Pradesh and India, in case of the same caste distribution in the state as compared to India. In the NFHS I (1992-93), fertility is at the same level in the state and in the country overall, so there are others socioeconomic, demographic and cultural causes of fertility difference in the study area. In the next round of NFHS II, if the caste composition would have been the same, then the fertility in Madhya Pradesh would have been 3.13 which is

0.18 (3.31-3.13) point less than actual fertility in the same survey. There is 0.7 point lagging in fertility than actual in the state due to differences in the caste distribution. In the NFHS III and NFHS IV, the others factors remain dominating the causes of fertility decline. It is also very clear that causes of differences due to caste distribution factors are increasing with the passage of time. During the NFHS I, the fertility level was the same in the state and India, and after that differences in fertility appeared. Therefore differences might be due to an increase in the socioeconomic gap over a period of time.

Table 1: Decomposition of TFR by Caste, 1991-92 to 2015-16						
Survey	M. P. Actual TFR	M.P. Standardized for All India Caste distribution	India Actual TFR	Difference		Total
				Due to Caste distribution	Due to Other Factors	
NFHS- I	3.90	3.90	3.39	0.00 (0.0)	0.51 (100)	0.51 (100)
NFHS- II	3.31	3.13	2.85	0.18 (38.5)	0.28 (61.5)	0.46 (100)
NFHS- III	3.12	2.94	2.68	0.18 (40.2)	0.26 (59.8)	0.44 (100)
NFHS- IV	2.32	2.25	2.18	0.70 (50.0)	0.70 (50.0)	0.14 (100)
Note: Figures in parentheses show percentage share of factors						

Decomposition of fertility with the place of residence have been presented in the Table 6.2, which shows the differences due to residence distribution in Madhya Pradesh and India. The cause of fertility difference between Madhya Pradesh and India is 2.5 percent in the NFHS I, and increase to 6.7 percent and 14.29 in NFHS III and NFHS IV respectively. If urban-rural distribution would have been the same compared to the national level, then there might be differences between 0.1- 0.3 points which is very minimal in the area. The minimal difference in the standardized and actual fertility in four round of the NFHS show the rural-urban distribution does not have substantial impact in order to decline fertility therefore differences due to other factors are dominating in all four rounds of the survey in Madhya Pradesh.

Table 2: Decomposition of TFR by Place of Residence, 1991-92 to 2015-16						
Survey	M. P. Actual TFR	M.P. Standardized for All India Residence distribution	India Actual TFR	Difference		Total
				Due to Residence distribution	Due to Other Factors	
NFHS- I	3.90	3.89	3.39	0.01 (2.5)	0.50 (97.5)	0.51 (100)
NFHS- II	3.31	3.31	2.85	0.00 (0.0)	0.46 (100)	0.46 (100)
NFHS- III	3.12	3.09	2.68	0.03 (6.7)	0.41 (93.4)	0.44 (100)
NFHS- IV	2.32	2.30	2.18	0.02 (14.29)	0.12 (85.71)	0.14 (100)
Note: Figures in parentheses show percentage share of factors						

Education is one of the essential drivers of socioeconomic, and

cultural development of women. By the women's education, decomposition analysis with fertility have been carried out for the four rounds of NFHS. If Madhya Pradesh would have been at the same education level then the fertility in the state would be 3.86 (0.04 points) less in the NFHS I. In the NFHS II, due to women's education distribution, causes of differences are 32.1 percent or 0.14 points (3.31-3.17) in the state as compared to the national level. Differences due to women's education distribution in the NFHS IV is totally dominated by the other factors. Differences due to women's education is found to have very minimal impact on the causes of fertility while other causes are

Table 3: Decomposition of TFR by women's Education, 1991-92 to 2015-16						
Survey	M. P. Actual TFR	M.P. Standardized for All India Women Education distribution	India Actual TFR	Difference		Total
				Due to Women Education distribution	Due to Other Factors	
NFHS- I	3.9	3.86	3.39	0.04 (8.34)	0.47 (91.7)	0.51 (100)
NFHS- II	3.31	3.17	2.85	0.14 (31.1)	0.32 (68.9)	0.46 (100)
NFHS- III	3.12	3.04	2.68	0.08 (19.1)	0.36 (80.9)	0.44 (100)
NFHS- IV	2.32	2.41	2.18	-0.09 (*)	0.23 (*)	0.14 (*)
Note: Figures in parentheses show percentage share of factors						
* Percentage contributions not given as the difference is very small.						

dominating in fertility differences in all four round of the NFHS (Table: 3).

Information on wealth index is not available in NFHS I, NFHS II and NFHS IV. Only wealth index is available in NFHS III among all four rounds of NFHS report in MP. Therefore, the decomposition analysis of fertility with wealth index could not be carried out for rest rounds of the NFHS. TFRs differences is 61.0% or 0.27 points (3.12-2.85) due to wealth distribution. On the other hand 38.6 % differences exists because of the other factors as well. So it is observed from the decomposition analysis that, wealth index is a dominant factor for fertility, which can be higher than India level, and there is

Table 4: Decomposition of TFR by Wealth Index, 1991-92 to 2015-16						
Survey	M. P. Actual TFR	M.P. Standardized for All India Wealth Index distribution	India Actual TFR	Differences		Total
				Due to Wealth Index distribution	Due to Other Factors	
NFHS- I	3.90	-	3.39	-	-	-
NFHS- II	3.31	-	2.85	-	-	-
NFHS- III	3.12	2.85	2.68	0.27 (61.4)	0.17 (38.6)	0.44 (100)
NFHS- IV	--	--	--	--	--	--
Note: Figures in parentheses show percentage share of factor						

unfavorable condition of wealth in the state.

Conclusion Fertility decline in MP over a period of time due to various socioeconomic reasons such as place of residence, caste, education of

women and wealth index as comparison to all Indian states (national average). The fertility has declined in the state substantially and higher pace and reached near the replacement level which is 0.14 points higher than the national level. There is gap in fertility due to unfavourable wealth condition in the state as compared to national level is one of the dominating factors. Simultaneously, caste distribution of women is another factors of fertility which is directly linked with the lagging of fertility rates. While other routine factors such as women's education and place of residence show minimal impact in the state compared to national level. Fertility behavior of the women is affecting from the various factors and other all factors are not mutually exclusive in nature. It is varying among the social groups and across the geographic regions/states.

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An exploratory study to assess the level of knowledge on biomedical waste management and practice regarding safe disposal of needle among lab technician in a view to develop information booklet on biomedical waste management at selected hospital of Chhattisgarh

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Abstract- *The proper handling and disposal of Bio-medical waste (BMW) is very imperative. There are well defined set of rules for handling BMW worldwide. Unfortunately, laxity and lack of adequate training and awareness, in execution of these rules leads to staid health and environment apprehension. In this research paper, awareness about bio-medical waste (BMW) management rules among health care personnel of some important health care facilities in Agra is evaluated Undertaken by Neelam Sahu in partial fulfillment of the requirement for the degree of master in nursing at government college of Nursing, AYUSH university of Raipur Chhattisgarh, during the year 2014-2015. The Conceptual framework of the study was based on Health Belief Model. The research approach adopted for the study was exploratory research adopted for the study was descriptive research design. The population comprised of 60 Lab Technician in selected hospital Raipur, Chhattisgarh Purposive sampling technique was used to select sample of 60 Lab Technician. An information booklet was developed to provide knowledge regarding the importance of lab technician. The validity of the tool was established by 7 experts. The reliability of the tool and feasibility were verified through a tryout and pilot study. The reliability of the tool was established by split half method. The reliability co-efficient was found to be for knowledge and for the practice. The data was collected from after taking formal approval from the medical superintendent, Dr. Bhim Rao Ambedkar Hospital Raipur, Chhattisgarh Purpose of the study was explained to the group and confidentiality assured. The data collected was analysed using descriptive and inferential statistics in terms of frequency and percentage Mean, Standard Deviation, Mean Percentage, r value, Chi – square test. Major findings of the were as followed. The total score of knowledge of Lab Technician Mean, Standard Deviation and Mean Percentage the total score of practice of Lab Technician is Mean, Standard Deviation and Mean Percentage. The findings of the study have several implications on nursing practice, nursing education nursing research and nursing administration. Based on the recommendation for the future research was also made.*

Keywords- *Biomedical waste, Management, Disposal, Needle, Technician*

Introduction- Infection precautions are needed if patient develops Infection that is considered a risk to others. The purpose of these precautions is to prevent the transmission of organism from patient to of health care providers, from health care providers to patient and from one patient to another.

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The health and safety executive's information sheet, health and safety (sharp instrument in health care) regulation 2013 – guidance for employers and employees (HSE,2013) provides further clarity on employers and employee groups covered by the regulation Provide appropriate training to ensure employees know how to work safety. The training must cover the correct use of safe sharp safe use and disposal of sharp what to do in the event of an injury and the employers arrangement for health surveillance. There are many institution in India that is providing nursing education .The increased demands of nurse in national and international level had created and impact in our education system .that trend seen since last few years has shown .that the lot of female are interested in pursuing there carrier has Nurse whether in India or at international level .Hence our education system need to be rigid and more practice based so that our products can be compete and prove their best ability in national and international level .The Nursing students are posted from the first year to various Hospital where they gain there practical experience which range from vital taking ,giving oral and parenteral medication and various procedures .Nursing students are therefore at increased risk for acquiring blood borne infection the level of the risk depends on various factors such as the number of patient with that infection .the technique of handling blood and blood borne products, the precaution they take during performing the procedure.

Objective

1. To assess level of knowledge among lab technician regarding biomedical waste.
2. To assess the practice among lab technician regarding safe disposal of needle.
3. To correlate knowledge on biomedical waste management and practice regarding safe disposal of needle.
4. To find out association between level of knowledge and practice regarding biomedical waste management and safe disposal of needle with selected socio demographic variable.

Assumption of the Study- The study assume that

1. Lab technicians have existing some knowledge regarding biomedical waste management
2. Adequate knowledge and practice regarding biomedical waste management and safe disposal of needle will improve health

Review of Literature-

1. Literature related to knowledge regarding biomedical waste management
2. Literature related to safe disposal of needle

Material and Method

Research Design- In this present study non – experimental exploratory research design was used in this study.

Description of the Tool- After reviewing the research and non research material and seeking the opinion of expert, self structured questionnaire

schedule was prepared to assess the knowledge and practice of biomedical waste management and safe disposal of needle regarding lab technician. The self structured questionnaire consists of three questions:-
Section I – the section consist of 9 items on background data of lab technicians like age, gender, religion, marital status, educational qualification, professional qualification, occupation, experience, monthly income .

Section II – this consist of 24 knowledge items following content area:

1. Knowledge of biomedical waste and it hazards – 10 items
2. Level of awareness on biomedical waste management practice - 5 items
3. Level of knowledge among lab technician on needle stick injury- 9 items

All question were multiple choice question (MCQ) and having one correct answer. Each right answer has weight age of one mark and wrong answer score zero.

Section III – consist of 8 practice items in term of expressed practice on safe disposal of needle in lab technician.

Items - 8

Socio-demographic characteristic of the participation- fig 3(a) to 3(I) depicts that relation to Age in year, the maximum number of lab technician (38.33%) were in the age group of 20-25 year, whereas the minimum lab technician (11.66%) belonged to 31-35 year, (36.66%) belonged to age group 26-30 year, and (13.33%) belonged to age group above 35 year.

In terms of Sex it depicts that maximum lab technician (73.33%) were male and only (26.66%) were female. In terms of Religion it depicts that maximum lab technician (80%) Hindu and minimum (3.33%) were Christen, and (16.66%) were Muslim.

In terms of marital status it depicts that maximum lab technician (63.33%) were married and only (36.66%) were unmarried. With regard to educational qualification of lab technician maximum number of lab technician that is (65%) belonged to graduate, where as minimum number of lab technician that is (6.66%) were post graduate, (28.33%) were higher secondary school. With regard to professional qualification of lab technician maximum number of lab technician that is (83.33%) belonged to diploma 1 year, whereas minimum number of lab technician that is (16.66%) were degree 2 year. As per occupation of lab technician it depicts that in lab technician of maximum population that is (66.66%) were government job, whereas minimum number of lab technician that is (33.33%) were contract job.

As per experience in year it depicts that is lab technician of maximum population that is (38.33%) were 5-10 year, whereas minimum number of lab technician that is (1.66%) were 0-1 year, (33.33%) were 2-5 year, and (26.66%) were above 10 year. In terms of monthly income it depicts that among the lab technician maximum number of population that is (63.33%) belonged to above Rs. 16,000 /-per month, whereas minimum number of population that is (16.66%) belonged to Rs 5000-10,000 /-per month, (20%) had belonged 10,000-15,000 Rs/- per month.

Hence It may be conclude that maximum samples (38.33%) were for 20-25 year of Age, maximum samples (73.33%) were male, maximum samples belongs to (80%) Hindu religion, maximum samples belongs to (63.33%) were Married Marital status, maximum samples belongs to (65%) were Graduate Educational Qualification, maximum samples belongs to (83.33%) were Diploma 1 year Professional Qualification, maximum samples belongs to (66.66%) were Government Job Occupation, maximum samples belongs to (38.33%) were 5-10 year Experience in year, maximum samples belongs to (63.33%) above 16000 Monthly Income.

Level of knowledge scores of lab technician regarding biomedical waste management- depicts that maximum number of lab technician that is 45 (75%) having average knowledge, minimum no of lab technician that is 6 (10%) having good knowledge and 09 (15%) lab technician had poor knowledge. Mean was (11.7), mean percent was (48.75), and SD (3.24).

Hence it may conclude that according to mean that in 11.7 and mean percent in 48.75 so the majority of samples fall in average knowledge regarding biomedical waste management.

Practice score of lab technician regarding safe disposal of needle- depicts that maximum number of lab technician that is 34(56.66%) having average knowledge, minimum no of lab technician that is 17 (11.66%) having good knowledge and 19 (31.66%) lab technician had poor knowledge. Mean was (4.93), mean percent was (61.62), and SD (2.14).

Hence it may conclude that according to mean that in 4.93 and mean percent in 61.62 so the majority of samples fall in average knowledge regarding safe disposal of needle Correlate knowledge on biomedical waste management and practice regarding safe disposal of needle

Table -01
Co-efficient of correlation between knowledge
and practice scores of lab technician regarding biomedical
waste management and safe disposal of needle

N= 60			
VARIABLE	MEAN	SD	
knowledge	11.7	3.24	0.61 significant at 0.001 level
practice	4.93	2.14	

Table no. 1 fig. no. 6 Mean score of knowledge was 11.7 and SD= 3.24 and practice mean score was 4.93 and SD = 2.14 and correlation coefficient was 0.61. Hence it may be conclude that if lab technician have good knowledge their practice also improve their will be positive correlation between knowledge and practice regarding biomedical waste management and safe disposal of needle.

To find out association between level of knowledge and practice regarding biomedical waste management and safe disposal of needle with selected socio demographic variable

Table 02
Chi square (Chi Square) analysis for association
between knowledge with selected demographic variables

N=60									
S.No	Socio-demographic variable	knowledge Criteria			Total	DF	Chi square	Critical value	Remark
		Good	Average	Poor					
1	Age in year								
1.1	20-25	3	16	4	23	6	2.8	0.834	P>0.05 NS
1.2	26-30	2	16	4	22				
1.3	31-35	0	6	1	7				
1.4	Above 35	1	7	0	8				
2	Sex								
2.1	Male	4	34	6	44	2	0.455	0.797	P>0.05 NS
2.2	Female	2	11	3	16				
3	Religion								
3.1	Hindu	36	5	7	48	4	28.3	0.001	P=0.001 HS
3.2	Muslim	2	1	7	10				
3.3	Christen	0	2	0	2				
3.4	Others	0	0	0	0				
4	Marital status								
4.1	Married	3	30	5	38	2	0.909	0.635	P>0.05 NS
4.2	Unmarried	3	15	4	22				
5	Educational qualification								
5.1	Higher school	0	0	0	0	4	7.15	0.128	P>0.05 NS
5.2	Higher secondary school	4	12	1	17				
5.3	Graduate	2	29	8	39				
5.4	Post graduate	0	4	0	4				
6	Professional qualification								
6.1	Diploma 1yr	2	45	3	50	2	17.3	0.001	P=0.001 HS
6.2	Degree 2yr	0	5	5	10				
7	Occupation								
7.1	Government	2	31	7	40	2	3.6	0.165	P>0.05 NS
7.2	Private	0	0	0	0				
7.3	Contract	4	14	2	20				
8	Experience in year								
8.1	0-1	0	1	0	1	6	3.63	0.727	P>0.05 NS
8.2	2-5	2	17	1	20				
8.3	5-10	3	15	5	23				
8.4	Above 10	1	13	2	16				
9	Monthly income								
9.1	5- 10,000	0	10	0	10	4	12.5	0.014	P<0.05 S
9.2	10-15,000	4	7	1	12				
9.3	Above 16000	2	28	8	38				

*Significant at 0.05 level

- Not significant at 0.05 level

Table Showing association between knowledge score of biomedical waste management of lab technician with significant socio demographic variables reveals that the findings with regard to association of knowledge with Religion Chi Square value was 28.3, df= 4 which was highly significant at p= 0.001, with regard to Professional qualification Chi Square value was 17.3, df= 2 which was highly significant at p=0.001, with regard to Monthly income Chi Square value was 12.5, df= 4 which was significant at p= 0.014, with regard to Educational qualification Chi Square value was 7.15, df = 4 which was not significant at p= 0.128, with regard to Experience in year Chi

Square value was 3.63, $df = 6$ which was not significant at $p = 0.727$, with regard Occupation Chi Square value was 3.6, $df = 2$ which was not significant at $p = 0.165$, with regard Age in year Chi Square value was 2.8, $df = 6$ which was not significant at $p = 0.834$, with regard Marital status Chi Square value was 0.90, $df = 2$ which was not significant at $p = 0.635$, with regard Sex Chi Square value was 0.455, $df = 2$ which was not significant at $p = 0.797$.

Hence it may conclude that Religion, Professional qualification and Monthly Income were found significant association with knowledge score. Table Showing association between practice score of safe disposal of needle of lab technician with significant socio demographic variables. Table reveals that the findings with regard to association of practice with Professional qualification Chi Square value was 17.3, $df = 2$ which was highly significant at $p = 0.001$, with regard to Educational qualification Chi Square value was 9.41, $df = 4$ which was not significant at $p = 0.052$, with regard to sex value was 5.41, $df = 2$ which was not significant at $p = 0.067$, with regard to Experience in year Chi Square value was 6.19, $df = 6$ which was not significant at $p = 0.391$, with regard to Occupation Chi Square value was 1.94, $df = 2$ which was not significant at $p = 0.379$, with regard Age in year Chi Square value was 4.48, $df = 6$ which was not significant at $p = 0.612$, with regard Marital status Chi Square value was 3.21, $df = 2$ which was not significant at $p = 0.201$, with regard Religion Chi Square value was 1.61, $df = 4$ which was not significant at $p = 0.806$, with regard monthly income Chi Square value was 1.67, $df = 4$ which was not significant $p = 0.797$.

Hence it may conclude that Professional qualifications were found significant association with practice score.

Conclusion- On the basis of the above findings of the study following conclusion could drawn.

The study revealed that the lab technician had good knowledge regarding biomedical waste management.

- The study revealed that the lab technician good practice regarding safe disposal of needle.
- The study reveals that there is a significant relationship between knowledge and practice of lab technician on biomedical waste management and safe disposal of needle.
- The study shows there was significant association between knowledge with selected demographic variables like Religion, Monthly Income, and professional qualification whereas there was no significant association found with variables like Age, Sex, Marital status, Educational qualification,
- Occupation, Experience in year at 0.05 level of significance.
- The study shows there was significant association between practice with selected demographic variables like professional qualification whereas there was no significant association found with variables like Age, Sex, Marital status, Educational qualification, Religion, Monthly Income, Occupation, Experience in year at 0.05 level of significance.

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The Castes of Superior Cultivators in Awadh

•Nisha Rathore

Abstract- *The superior cultivators were those who developed proficiency and skills in agriculture. Their involvement in agriculture from generations made them expert in agriculture. It was their original profession, and they did not have any other subsidiary profession. They were exclusively devoted to agriculture. Kurmis, Kachhis, Koeris and Muraos belong to the castes of superior cultivators. They worked in the agricultural fields with their own hands along with their wives and children. Thus they got free labour for their agricultural work.*

Keywords- *Superior cultivators, Kurmis, Koeris, Kachhis, Muraos, excellent cultivators, proficiency, agricultural skill..*

Introduction- The cultivators of some castes have been described by the colonial as well as the post – colonial historians as the castes of superior cultivators. Kurmis, Kachhis, Koeris and Muraos belong to these castes. The question arises what made the cultivators of these castes the superior cultivators? There are several reasons for this. The primary reason is that the cultivation is their traditional profession. For centuries they were involved in the profession of agriculture. Their involvement in agriculture from generations made them expert in agriculture. Referring to the proficiency and expertise of superior cultivators in agriculture, Professor S. Bhattacharya says:¹

Evidently. . .Koeris, Kurmis, and Kachhis, the
Traditional growers of the crop, fared better
Than the other caste groups such as the
Rajputs. Their long experience and skill. . .
Enabled the former considerably to reduce
The chances of crop failures.

For obtaining the good crop several activities in agriculture have to be performed timely. For example, sowing of seeds, irrigation, manure, pesticide, harvesting, etc., are to be done in time. If these things are not done in time, there are more chances of ruining the crop. Koeris, Kurmis and Kachhis know very well the timings for the application of different agricultural activities. And they have acquired this knowledge from generations of experiences. They have developed high skills in agriculture. Agriculture is their hereditary profession.

Coupled with the condition of proficiency and skill in agriculture is the condition of devotion to agriculture. One may be exclusively devoted to agriculture or partly devoted to it. The urban migrants to the villages were not fully devoted to agriculture. So also were the people from professions other than agriculture. Agriculture was their subsidiary profession. But agriculture was not a subsidiary profession for Kurmis, Koeris, Kachhis and

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Muraos. It was actually their original profession, and they did not have any other subsidiary profession. They were exclusively devoted to agriculture. They, therefore, developed skills in agriculture which the cultivators of other castes could not do.

The cost of production incurred by the superior cultivators was quite low, because they did not use hired labour in their fields. They worked in the fields with their own hands. And with them also worked their wives and children. Thus, they got free labour for their agricultural work. Nothing was spent on the labour done by the women and children of the family. As Bhattacharya says:²

The non-existence in their case of any caste
Ban on direct cultivation, or on the
Participation of the female members in
This, enable them largely to do without
Hired labour and thus to cultivate the
Crop at a cost much lower than the one
Which the peasants of superior castes
Employing hired labour usually incurred.

The cultivators of agricultural castes got free labour power. It was free in the sense that their women and other family members were not paid servants like the agricultural labourers. Asiya Siddiqi also refers to the case of superior cultivators concerning the labour power of their women which was not available in the case of cultivators of higher castes. As she says:³

In contrast to the higher castes . . . the Kurmis
And other low castes performed all the hard
Labour of cultivation themselves, were often
Assisted in the field by their women, and were
Well known for being altogether superior
cultivators.

Thus the question what made some castes as the castes of superior cultivators has a simple answer. Agriculture was a joint effort of the family, and the family had no other means of livelihood.

Among the women of superior cultivators the Kurmi women were quite reputed for helping their husbands in the agricultural work. Referring to the wife of a Kurmi cultivator, Crooke mentions:⁴

. . . the industry of his wife has passed a
Proverb – BhalijatKurmin, khurpi hath,
Khet nirawepan pi kesath. “A good lot
Is the kurmi women; she takes her spud
And weeds the fields with her lord.”

The women of other superior cultivators like Koeris, Kachhis and Muraos also work with their husbands; but the Kurmi women excel them all. Perhaps this is the reason that Kurmis have become the leaders of other superior cultivating castes. They have become the genuine sons of the soil.

Among all the other cultivating castes Kurmis are the most important caste. It is considered that the Kachhis, Koeris, Kisans and Malis are the several endogamous groups of the Kurmi race. Regarding the

importance of Kurmis, Crooke says that there are :⁵

6 1/2 millions of the middle class cultivators, of
Whom the most important is the great Kurmi
Race. This has thrown off numerous
Endogamous groups, such as the Kachhis,
Koiris, Kisans and Malis.

Similar views have been expressed by Crooke in his other work :⁶

Kurmis . . . as an occupational caste from which
Has, at various times, diverged a series of kindred
Castes, such as the Koiris, Kachhis, Saini, Mali,
And others connected with the higher forms
of husbandry.

Almost all the castes of superior cultivators have been claimed to be generated by the Kurmi caste. But this may be disputed as a theory of the origin of the Kachhis, Koeris, Muraos, etc. However, this shows that the Kurmis are the most important caste of cultivators. Though they are Sudras they have a position of honour among the Sudras. Referring to the account of Buchanan, Dalton points out, 'Buchanan gives the Kurmis a high position amongst the Hindus of the Sudra caste.'⁷ But these days Kurmis belong to the OBC category; many of them are well educated professionals. Some of them are well involved in politics. In western U.P. they are well off economically and socially.

There are minor differences among the superior cultivators regarding the production of crop. According to Crooke :⁸

Kachhis. . . devote themselves to the cultivation
Of the more valuable crops, such as opium,
Tobacco, garden vegetables.

Regarding the occupation of Muraos, Crooke says :⁹

Their occupation throughout the Province is
Gardening, cultivation, and in particular, the
Growing of the more valuable crops, such as
Opium, tobacco, sugarcane, vegetables.

Kurmis, it seems, are very different from Kachhis, Koeris and Muraos. According to Risley :¹⁰

Kurmis . . . are noted for their industry in the
Management of the staple food crops, and
Are particularly successful wheat-growers.

Among the superior cultivators Kurmis are the exceptional ones who do not involve in gardening, and so also they do not grow vegetables for sale. They are reputed for growing the staple food crops like wheat, rice, pulses, maize, jwar, bajra, etc. These days they are also growing sugarcane, potato mustered seeds etc., at a large scale. Kurmis are always large-scale cultivators and, therefore, they distinguish themselves from the small-scale cultivators. Kurmis consider themselves the sustainer of life on the earth. One can earn more money by growing opium tobacco, vegetables etc., as the Kachhis, Koeris and Muraos do.

Kurmis of Awadh, among the lower castes, exhibit some marked characteristics apart from being the excellent cultivators. On the one hand

they were found as bonded labourers in Gonda and Bahraich districts, and on the other hand some of them became zamindars and taluqdars, leading to the title of raja. For example, Darshan Singh became very powerful during the nineteenth century. Concerning the life of Darshan Singh, the Oudh Gazetteer mentions :¹¹

... He was ... enrolled in a regiment of
Youth kept up by ... Nawab (Saadat Ali
Khan) under the designation of the "Shaitan
Ki Paltan" ... The boy Darshan in time rose
To be a Jamadar ... (then) was entrusted
With the command of a regiment ... was
Then created a raja ... The importance of
The raja was still further advanced by his
Being permitted to sit in the royal
Presence, with the additional title of
Ghalibjang (Conqueror in battle).

Most of the colonial historians have mentioned the name of Darshan Singh as an example of a poor peasant and labourer boy who rose to a very high rank, and became an adviser of the Nawab.

Darshan Singh's son Raja Jai Lal Singh was no less an important historical figure. He participated in the revolt of 1857 and was later hanged by the British for 'becoming the spokesman of the rebel officers to the Begum.'¹² As a matter of fact it was Jailal Singh who was instrumental in declaring on July 4, 1857 the son of Wajid Ali Shah and Begum Hazrat Mahal, the king of Awadh. He along with Mammu Khan declared the independence of Awadh from the British. Referring to the acts of bravery of Raja Jai Lal Singh, S. N. Qanungo, the reputed medieval historian, says :¹³

... when Wajid Ali Shah was setting his
Composition – Mai Neer Bharan Kaise Jaun
Sakhiri ... , Begum Hazrat Mahal was bravely
Riding an elephant to inspire her men in
Awadh and Raja Jai Lal Singh placing the
Loop of the cord of execution smilingly
around his neck, 'as if he was wearing a
garland of flowers.'

The Kurmis acquired a name for the acts of bravery and sacrifice along with their name as superior cultivators of food grains.

To conclude, the superior cultivators as Kurmis, Kachhis, Koeris, Muraosets., paid high rent in comparison to the cultivators of high castes as Brahmans and Kshatriyas. That is why Kurmis wanted to be considered as Kshatriyas simply because they wanted reduction in their land rent. Once they become the Kshatriyas they would enjoy the economic benefits given to the Kshatriyas. This shows that the issue of sanskritisation had an economic angle too. Among the cultivating castes, the Kurmis of Awadh formed a unique set. They were found in Gonda and Bahraich as bonded labourers. But in several districts of Awadh they were found as taluqdars, zamindars and moneylenders.

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Indian Mining Sector: Issues and Environmental Problems

• Poonam Chaudhary

Abstract- *Public response to mining is always negative because it creates mostly a direct environmental impact. The adverse impacts due to mining, in general, are the effect on the existing land, water and air systems. Noise pollution is another serious problem, especially when mines are located near the human population as well as wild life habitat. Compared to the underground mining, the open cast mining, which is being preferred, also generates huge volumes of waste rocks. Mining of leaner grades also generates large quantities of wastes. During their beneficiation process. Therefore, generation of waste rock is almost an unavoidable problem whether, it is done by open cast mining or underground mining. Other major environmental problems associated with mining are the tailing disposal and acid mine drainage. Bioaccumulation and concentration of toxic metals and thus entering in to food chain was also noticed. To reduce the generation of wastes from these mines, geo-technical studies and ground water studies are being under taken, for possible steepening of the pit slopes. The minerals reserves occurring within the forest areas are being prepared. The mitigation measures being adopted for the pollution control and environmental management in Indian mineral sector include land restoration/reclamation, afforestation, and protection of surface drainage system, dust control, control on noise & vibrations. It is also necessary to undertake Techno-Economic benefaction studies of the mine wastes, to recover valuable minerals present, so as to improve the overall economics on mining.*

Keywords- *Mining, minerals & metals reserves, environmental mitigation, bioaccumulation*

Introduction- Environmental protection is a prerequisite for sustainable development. India is richly endowed with variety of minerals. The total lease area covered by the mining leases (covering about 64 minerals) is 6925 sq. km. Majority of these mines covering about 30 minerals and owned by private individuals are medium and small scale. Majority of production, during the initial stages, was coming from underground mines.

At present the trend has shifted towards open cast mines. This has resulted in an increase in the environmental problems. Though the percentage of land affected by mining is relatively small, but their concentrations as well as location in some environmentally fragile areas makes the situation grim and requires large-scale environmental protection measures. For sustainable development of the industry, these Mining plans are being examined, approved and implemented by IBM (Indian Bureau of Mining). The national mineral policy was amended in 1993 to attract foreign investors in the mineral Industry. Minerals and metals are the main resources for the economic development and welfare of the society, specifically for the

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developing countries like India. This requires preparation of detailed maps clearly demarcating fragile zones, overlaying the mineral deposits, for their protection. In mining drilling and blasting operation are considered to be hazardous.

Sustainable development can occur only when the resources are renewable. As the mineral resources are considered nonrenewable, their sustainable development means proper planning of their exploration and exploitation activities, such that these limited resources are conserved to longer period and the reserves are properly utilized in terms of their grade, with least damage to the environment. In the present context of upcoming investment in industrial and infrastructure sector, to maintain the ecological balance, there should be a planned development approach for identifying the locations of environmental impacts and taking actions continuously for environmental protection.

Majority of the mines in India are located in rural and remote areas, which are thinly populated. Therefore, they do not affect the sustainable urban development. However, there are clusters of small mines in India of minor mineral, adjoining urban areas. They are mostly related to mining of minor minerals such as building stone, sand, marble etc. Though these mines individually are small in nature, as they are clusters, they may lead to serious land degradation problems as well as involve in hazardous operations like drilling and blasting. Transportation of this material by trucks may also give rise to some natural hazards, like road accidents due to heavy traffic and dust pollution.

Scenario on Existing Metals and Minerals Industry- The mineral sector in the country can be broadly divided into metalliferous group and the other fuel group, composing the fuel, coal, mineral oil, and radioactive minerals. The present study is confined to the metalliferous mineral sector in India. Amongst the important minerals produced in India are Asbestos, Bauxite, Barytes, Copper, China clay, Chromite, Diamond, Felspar, Gold, Graphite, Iron ore, Lead, Limestone, Manganese, Mica, Quartz, Rock-phosphate, Tin, Zinc etc.

The problems of land degradation in these areas are mainly due to quarrying, waste dumping and development of infrastructures with respect to their affect on forest growth, agricultural and sometimes in rehabilitation of small villages located nearby. The envisaged are with respect to drilling and blasting operations. The discharge of toxic element through effluents as well as wash off from the unprotected waste dump would cause siltation and also affect the soil and water qualities.

The total number of prospecting licences (Aerial prospecting) granted in respect of large areas, i.e. after liberalization, is 63 covering about 850000 sq. km. In respect of small areas, the number is about 150, covering an area of about 3820 sq. km. The total number of minerals, for which mining leases are granted in India, stands at 64 (including 4 fuel minerals), out of which 10 are for metals and 54 for non-metals. The total number of mining leases granted is 9244, out of which 1600 are under metallic, minerals and 7644 are under non-metallic minerals. The total are covered by the above mining

leases is about 6925 sq. km., 4545 sq. km. under non-metallic and balance 2380 sq. km. under metallic. The total reserves of metallic and non-metallic minerals are about 17,000 and 88,000 million tons respectively.

The Trends in Mining and Metals Industry- The mining industry in India is fairly well developed, but their total activities are confined to area of about 7150 sq. km. (About 0.22% of total land area), distributed basically over seven states. Though the percentage of land affected by mining is relatively small, but their concentrations as well as location in some environmentally fragile areas makes the situation look grim and requires large scale environmental protection measures, calling for modifications in the conventional methods of mining. For conservation and scientific development of mineral deposits, Mines and Mineral Regulation & Development (MMRD) Act, Mineral Conservation and Development Rules (MCDR) were framed in the year 1955. These rules were amended in 1988, to take into account the pollution control and environmental protection aspects and to make submission of the mining plans/mining schemes. Along with environmental management plans, by the mining companies, as mandatory.

Majority of mines in India, covering about 30 minerals and owned by private individuals, is of medium and small scale. However, the ILO maintains that small scale mining can and should be encouraged by growing the operating environment that encourages the use of best technique for mining and occupational health and safety of environmental protection.

To compete with the global market and to allow free market facility, the Indian Mineral policy was amended in the year 1993, to attract foreign investors, to invest on exploration, exploitation of minerals and extraction of metals. The basic objectives of this national mineral policy in respect of non-fuel and non-atomic minerals include-

- Exploration for identification of mineral wealth in land and in offshore areas.
- Development of mineral resource for adequate supply and best use.
- Uninterrupted development of mineral industry to meet the needs of the country, with financial support to mine development and exploration, and introduction of foreign equity investment in joint ventures in mining.
- Research and development with the use of automated equipment, deep-sea mining and in quality control.
- Education and Training facilities for human resources development.
- Minimize adverse effects on forest, environment and ecology.
- Due regards to safety and health of all concerned people and rehabilitation of displaced persons and mine closures.
- Amendments to this effect were also in 1994 in the Mines and Minerals Regulation and Development Act and Rules made there under. The highlights were:
 - 13 minerals were de-reserved for exploitation by private sector.
 - Any company registered in India, irrespective of its foreign equity

holding allowed to apply for mining lease or prospecting license.

- 50% foreign equity automatically allowed with RBI clearance for mining companies.
- 15 minerals were deleted from first schedule of MMRD Act. and prior approval of Central Government required for only 11 minerals.
- Period for prospecting license and mining leases as well as their renewal periods are increased and areas under prospecting licenses, to facilitate aerial prospecting, were also increased.
- 100% foreign direct investment may be permitted for 100% export oriented units.
- Among nonferrous metals. Which are under priority, India is self-sufficient only in aluminum.

In India consumption of aluminum is going to be in an increasing trend as it is being substituted for the use of wood in building construction work, because of the present hike in their cost due to their restricted availability due to the Government policy to conserve forest resources. The biggest private sector producer Hindustan Aluminum Company, Indian Aluminum Company, Utkal Alumina International Ltd., National Aluminum Company and Mukanda Group International Aluminum Products in Orissa are looking to boost their exports; especially those of value added products. They plan to increase export, as the international market is picking up and also local demand continues to remain poor.

Legal and Administrative Aspect of Sustainable Development- India is one of the few developing countries in the world, to have included sufficient element relating to improvement of environmental conditions in its national policy. For the ecology and environmental protection, in general for whole of the country, India made several enactments like. The Environmental (Protection) Act 1986, The Water (Prevention and control of Pollution) Act 1974, The Air (Prevention and Control of Pollution) Act 1981, The Forest (Conservation) Act 1990, The Wild Life (Protection) Act 1972 and the Rules made there under.

To keep pace with the emerging needs of the country, new areas on environmental degradation and pollution aspects have been identified from time to time by the department of Environment. This has resulted in setting up technical committees associated with Bureau of Indian Standards, to lay down a set of minimum requirements to protect the safety of public health, with regard to pollution control measures.

Standards were already set on the quality of water used for different purposes, air quality for different users, blast-induced ground vibration standards, ambient noise levels etc, to ensure quality, compatibility, reliability and cost reduction. Though there are Indian standards available for pollution control, some of them may need review. Ensuring policies at par with technological development and world trade, standards are required to be formulated to fill up the gap in their standardization. The international standards (ISO) are mostly of technical nature and have been identified as major non-performing barrier, in the current world market. To reduce this

technical barrier, world Trade Organization also promote the use of ISO standards and as far as possible to align the national standards with that of international level. For this purpose, some of the industries including few mining companies, in India have already got their certification for their quality management under ISO 9007 and for environmental management systems under ISO 14001.

The National environmental policy was also drafted and implemented. The National Forest policy formulated in 1952 was revised in 1988, with its recommendation that 33% of the land surface should be under forest cover. These are generalized for all the industries and not specific to mining. However, the department of Environment and Forest have issued guidelines and questionnaire in preparation of EMP for the mining areas, guidelines on diversion of forestland for non-forest purposes and Coastal Area Regulatory Zones for mining purposes. It has also constituted Environmental Appraisal Committee, with multi-disciplinary experts including mining, for the clearance of the project proposals.

Prohibition of mining operations, in some of the ecologically fragile areas like Doon valley in the state of Uttarakhand, Aravalli region of Haryana and Rajasthan states and prohibition blasting operations in some of the limestone mines in Himachal Pradesh state, were effected by the orders of Honorable Supreme Court of India. These are mostly in response to the writ petitions filed by the Non-Governmental Organizations. The honorable court has also banned the import of hazardous wastes, for the sustainable development of mineral industry.

For the sustainable development and protection of environment, specific to metalliferous mining, The Mineral Conservation and Development Rules were amended in 1988. It is to include control on pollution, Storage and reuse of top soil, Storage of overburden and waste rock, Reclamation and rehabilitation of lands, Precaution against ground vibrations. Control of subsidence, precaution against air and noise pollution, Discharge of toxic liquids and Restoration of flora. The Indian Bureau of mines (IBM), under the Ministry of Mines and Minerals, empowered to enforce these rules, is inspecting these mines regularly.

Environmental Impact of Mining- Environmental impact is the alteration of environmental conditions or creation of new set of conditions, adverse or beneficial, caused by human activity, such as industries including mining. However, public response to mining is always negative because it creates a most visual impact. It leaves ugly scars on existing landscapes. Mining areas often have a monochromatic appearance. Fine particles of ore and waste generated spread as layer of dust on every available surface in these areas. Location of crushers and grinders, within the mining areas, aggravates the situation. But unlike other industries, mining operations are transient in nature and are one time operation, the impacts of which are mostly reversible. The affected land can be brought back for a better land use. The beneficial impacts due to mining, as they are mostly located in backward areas, are the improvement in the economic status, infrastructures.

The adverse impacts due to mining, in general, are the effect on the existing land, water and air systems. Noise pollution is another serious problem, especially when mines are located near the human as well as wild life habitat. Besides leaving large excavations and huge waste dumps, mining enterprises, means the conversion of land to such purposes, as roads, railways and ropeways for the mineral transport, townships for housing, infrastructure for administrative purpose, land for stockyards and for preliminary processing of the ore.

In general, the waste generated from the mines are classified as the mine (overburden/side burden) waste and the ore beneficiation plant waste. The mine wastes are generally in large quantities but mostly inert, whereas the plant waste, though in small quantities are mostly toxic and sometimes hazardous too.

The other major environmental problem associated with mining is tailing disposal. Tailing is the residue of ore processing and represents a significant component of mineral waste. Though tailing is chemically similar to its parent ore but the presence of milling reagents, evaporation of free water etc. can change the properties. Tailings include a variety of heavy metals, radioisotopes, cyanide, hydrocarbons, salts etc. such constituents can leach from the tailings and enter surface and ground water. They can be disseminated through wind and water erosions. They can even migrate upward via capillary action and diffusion, to contaminate the soil placed over the tailing surface to support vegetation. They can even be absorbed by the vegetation and enter into food chain.

Some of these mining and milling wastes especially the pyritic, when exposed to the atmosphere have capability to become acid-producing, attributed by the microorganisms and there is often recognized as an environmental hazard. Though the mining industry is fully aware of the environmental problems, pollution hazards and attempts are being made to manage them; there is scope for improvements particularly in respect of treatment of toxic effluents and recovery of useful minerals/metals. Apart from the sediment deposition, environmental pollution that were noticed in the effluent discharge of some of the major metalliferous mines due to the presence of toxic and other elements are as follows (Table-1).

Table 01
The effluent discharge of toxic
and other elements from metalliferous mines.

S. N.	Metal and Mineral Mines	Discharge of Toxic elements
1.	Iron and Manganese mines	Fe, P, Mn, S, Ni, Mg
2.	Chromite mines	Cr, Cr, Vi, Co, Ti, Fe, Mn, Ni, Mg
3.	Lead and Zinc mines	Pb, Zn, Cu, Fe, S, Cd, As
4.	Copper mines	Cu, Mo, S, Fe, Ni, Ti, P, Mn, Sr, Ba
5.	Asbestos mines	Asbestos fiber, Serpentine
6.	Limestone and Dolomite mines	Ca, Mg, Sulphate ions, Electrical conductivity
7.	Phosphate mines	P, S
8.	Gold mines	As, S, Sn
9.	Bauxite mines	Al, Ti

From the above information, it is evident that the effluents released from the mine, mill and the tailing dams through wash off as well as through

seepage have a high degree of metallic concentrations, affecting the ground water as well as surface water resources.

Health Problems Due to mining of Toxic elements- Amongst the toxic elements present in the failing, lead is generally known to affect the blood system, cadmium cause kidney damage and hypertension, Arsenic is toxic and carcinogenic, Sulphur affects respiratory system and also damages plants. Hexavalent chromium-VI is a very toxic element known to be carcinogenic and other microelements present like nickel, cobalt, manganese and titanium are also equally harmful, aluminum cause the toxicity of nervous system.

The effluent released from the tailings and having high degree of metallic concentration are thus toxic. The rain water entering into mines having pyrite deposition is prone to be acidic because of the contact with sulphide mineralization and is likely to pollute the surface as well as ground water resources. This problem of acid mine drainage is being faced in some of the base metal, phosphorus and pyrite mines as well as in some of the coal mines.

Anthropogenic sources of air pollution due to mining are divided into two categories; (I) Mobile sources which include automobiles, transport trucks etc. and (II) stationary source which include loading and unloading points, blasting sites, crushing and grinding plants, stack emissions from the grinding and metallurgical plants and power generation plants attached to mines.

These sources emit a variety of particle and gas pollution into atmosphere. The quality of air at a receptor is determined by the type and amount of pollutants emitted up and the extent of atmospheric interactions that have occurred during the transport from the source to the receptor. Public generally judge air quality by visibility. But most of the pollutants in the ambient air are the suspended particles and gases that cannot be seen.

The airborne dust released affects the respiratory system, causing pneumocosis, and also causes dermal problems. Further, according to some formers report, a reduction in yield of some of the crops due to dust precipitation over the leaf foliage released from adjoining Limestone mines with captive cement plant have also been noticed.

To reduce the generation of wastes from these mines, geo-technical studies and ground water studies are being under taken, for possible steepening of the pit slopes. Beneficiation studies are also undertaken on pilot plant scale, to assess the recovery of valuables minerals from the wastes and to neutralize the toxic elements. The hazardous effects of hexavalent chromium generated, and also the nickel present, on the land, vegetation and water resources and animal life are also estimated.

Specific health hazards, which leads to Asbestosis, due to Asbestos mining and their processing plants, in India is being studied, in order to examine the possibility to lift the ban on granting of fresh mining leases and renewal of existing leases, for sustainable development of the industry.

For this purpose, study on air quality monitoring work was completed in the state of Andhra Pradesh and study in Rajasthan state is under progress, Finally a joint evaluation of these studies will be taken up in collaboration with the Directorate General of Mines Safety (DGMS).

Drilling and blasting operations are the main hazards of the mining industry, also they account for over 30% of the cost inputs. Blast vibration studies are being carried out for restricting the ground vibration by proper augmentation of the explosive charge used. Geo- technical studies, to arrive at the optimum pit slopes, to reduce the waste generation from the open cast mines are also being undertaken. In the Mining plans/Mining schemes prepared, use of alternative ground breaking systems in the mines, like deployment of surface miners and ripper-dozers are being considered. These are cost effective and promote better environment. Wherever it is possible uses of in-pit mobile crushers are being promoted, to control the dust generation problem. It is also found to be cost-effective.

To reduce the external waste dumping, which is costly and leads to environmental hazards, open-pit designs are being made to amalgamate simultaneous back filling of the pit, with the mine waste. This will also reduce the land degradation effect, due to mining. Mineral reject studies in the mines were carried out. Based on these studies, directives to the mine owners are issued to stack separately the low-grade ores, which can be beneficiated in future. Regular tests investigations on these samples are also being conducted at IBM laboratory.

Unlike other industries, mining operations are transient in nature and are one time operation-the impact of which in most cases may be reversible. The affected land can be ploughed back for a better land use. The beneficial impacts due to mining; as they are mostly located in backward areas, are improvement in the economic status, infrastructure, culture and social life and health care system of the area.

Pollution Control Measures to protect Environment- The mitigation measures being adopted for the pollution control and environmental management in Indian mineral sector are as follows:

1. Land Restoration/ Reclamation-

- a. Storage & Reuse of Topsoil: Separate stacking of topsoil and improvement in its quality for reuse.
- b. Design of solid waste dumps: Selection of areas, heights and slopes of the dumps and provision of intermittent berms.
- c. Design of retaining Walls for waste dumps: Their shape, width, height, and size of foundation and material for construction.
- d. Backfilling: Old & worked-out Quarries with the waste generated and in underground slopes to prevent subsidence.
- e. Design of tailing dams: Site selection, erection of dams, method of disposal, setting of slimes, decantation, reuse of water etc.
- f. Development of green belts: To prevent spread of pollutants in the surrounding areas.
- g. Improvements of land use in the Virgin Areas: Conversion in to cultivated lands, forest lands, picnic spots etc.
- h. Avenue plantations: In other areas like colony, other buildings, plant

area etc.

- i. Protection from landslides and subsidence: Through supports and backfilling in underground slopes and carrying geo-technical study to determine the safe angle for pit slopes.

2. Afforestation Programme-

- a. Mulching and artificial soil formation on the waste dump and over the reclaimed surfaces.
- b. Initial reclamation crop- To improve soil quality.
- c. Economic utilization of the area through commercial crops and by transplantation of trees and compensatory afforestation in respect of degraded forest areas.
- d. Provision of infrastructure facilities required for the afforestation work.
- e. Provision of Green Barriers, estimation of their widths and species selection as dust and noise arrestors and for site screening.

3. Drainage Control & Hydrologic Balance-

- a. Protection of surface drainage system.
- b. Design of garland drain.
- c. Design of check dams.
- d. Hydrological Balance and provisions for recharge of ground water.

4. Liquid Effluent Treatment-

- a. Treatment of plant drainage and mine water and neutralization of acid mine drainage.
- b. Design of settling tanks and water treatment plants.
- c. Design of sewage treatment plants and grease traps.

5. Treatment of Drinking Water-

Filtration and chlorination of potable water.

6. Control on soil Erosion- Design of drainage structures, spread of mulches and growth of vegetation.

7. Control on fall of Scree & Flyrocks- Modification of the drilling and stemming parameters to control the spread of fly-rocks.

8. Control Air Quality-

- a. Noxious Gases: Measures to control/ arrest emissions at source in the plants through scrubbers, traps and stacks.
- b. Dust Control: Measures to control/ arrest the spread of emissions at plants. Mines and mine roadways, through bag filters, scrubbers, water sprays and provision of green barriers.

9. Control on Noise & Vibrations-

- a. Noise level: Design of noise abatement structures and green barriers.
- b. ground vibrations: Use of controlled-blasting technique/ Alterations in respect of conventional blasting systems by the use of ground breakers, to protect surface features and migration of wild life.

10. Wild Life-Protection- Promotion of congenial environment for immigration of wild life and control on noise levels.

11.Human Environment- Preparation of practicable rehabilitation plans, where displacement of human settlements is needed and preparation of cost-benefit analysis.

12. Management of socio-Economic Fabric- Provision of new avenues for jobs, adoption of surrounding villages by the mine management, provision of rural development programmes, health care systems.

Conclusions- Minerals and metals are the main resources for the economic development and welfare of the society, specifically for the developing countries like India. The environmental consideration should be implemented in such a manner as not to become an impediment to mineral development. Therefore, mining and forest policies should be harmonized to facilitate sustainable development of natural resources like forests, biodiversity minerals water and land. This require preparation of detailed maps clearly demarcating the habited areas, forest land agricultural land and sensitive and fragile zones, overlaying the mineral deposits, for their protection. Applications of GIS as well as satellite imageries are essential to prepare these maps and work out the cost-benefit analysis in terms of human, economic and aesthetic values. From these maps, it is also possible to demarcate the abandoned on landscaping, with a time bound action plan, has to be attempted on a war-footing basis for the immediate reuse of the degraded land. This is also a suggestion for prioritization and direction of ESCAP. The implementation authority for this project would likely be the Ministry of environment and Forest, Government of India, IBM will however render necessary technical assistance. In this connection a seminar on 'Application of GIS package and Satellite imageries for Ore body modeling' will be of interest to India. It is necessary to develop a catalogue on best Eco-friendly practices in mining operations with international benchmarks. Detailed strategy and rehabilitation method for biological reclamation of mining areas in different geomorphological and climatic regions is to be developed; For this a workshop should be arranged, by ESCAP, in India.

India is a vast country with diversified climatic, topographic and socioeconomic conditions. Hence there cannot be any guideline or standard applicable to the entire country. In advanced countries, the environmental standard has been laid down on the regional basis (environmental basins.) therefore, site specific standard have to be evaluated where cluster of small mines exists along with a few major mines. In areas where such cluster of mines exists, to assess their carrying capacities, regional environmental impact studies should be carried out. Based on proper scientific evaluation, this will also assist the decision-makers in the notification as well as extension of the national parks and other sensitive zones and fragile areas.

Recognizing that the minerals are value creating assets of the country and also the country possess wide range of natural deposits, it is necessary to increase focus on the following R&D activities for technology up gradation and innovation to achieve sustainable development. In mining drilling and blasting operations are considered to be hazardous. Therefore, greater attention in R&D activities are to be paid in adopting more efficient ground breaking systems, to ensure safety, costs and better environment.

1. The other important area under R&D activity is on reduction of waste generation from mines, which not only occupies more land area, but also creates environmental hazards, especially in ferrous and base metal deposits. It is necessary to reduce their generation, by steepening the pit slopes, to ensure safety, reduction in costs and for better environment. It is also necessary to undertake techno-economic beneficiation studies of these mine wastes, to recover valuable minerals present, so as to improve the overall economics on mining.
2. R&D activities for biological treatment of the toxic effluents released from mines as well as the treatment mills, especially from the metalliferous deposits, should be expanded.
3. Continued support for globalization of mineral industry could only take place by commensuration the production with its mineral resources/ reserves. However, it is inter-linked with demand and supply position, which bring out thrust areas for exploration and development. Such areas especially occurring in forest are to be identified and their economically viable resource analysis is to be worked out.
4. Improved technique for mineral beneficiation for low-grade ores should be developed, so as to reduce the cost on their liberation. Use of bio-leaching technique, for the low-grade ores, which is Eco-friendly, should be examined.
5. Recycling of scrap, wherever possible in the metal refineries, should be adopted.
6. India recognizes that for development and management of mineral resources for sustainable economic development, problems need to be addressed in a context of partnership between the Government, mining companies and the local communities. Our Endeavour is to build this partnership on the basis of mutual recognition of the objective and values of the different parties to achieve the overall objective of sustainable development.

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Spatial Disparities in Public Healthcare Facilities in Jammu & Kashmir

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Abstract- *Jammu and Kashmir is characterised with high percentage of rural population with rugged mountainous topography is enough to aggravate the public healthcare provisioning. Rural healthcare system in the state is in dire situation in respect to physical infrastructure and provisioning of required man power for the proper functioning of these health centres. Recently, Panchayati Raj System has been introduced in state to tackle the regional imbalance in grass root level but the problems remains the same. The main objective of this paper is to explore the issues and challenges faced by rural people of Jammu and Kashmir and their possible solutions. Data from Rural Health Statistics report have been used for this paper. Results shown that rural healthcare system in Jammu and Kashmir is undergoing different challenges like shortages in human resources and facilities. To eradicate this challenges, more inflow of resources are needed. Although the average rural population covered by the health centres in Jammu and Kashmir is as per the recommended Indian Public Health Standards (IPHS) norms. The average number of villages, rural area and radial distance covered by the health centres are much higher which ultimately determines the healthcare seeking behaviour of population. Around three fifth of Sub centre and one fifth of Primary Health Centre in Jammu and Kashmir have been not functioning in Government building and surprisingly no health centre is functioning as per the IPHS norms.*

Keywords- *Sub Centre, Primary Health Centre, Community Health Centre*

Introduction- Public health care services are unevenly distributed and large variations are found in access to health care facilities among the states, and among the different socio-economic groups. Jammu & Kashmir as well as Ladakh were recently declared as a union territory.

Provisioning of public healthcare services to the vast majority of rural population has been the challenge in India since the Independence. The second most populous country after China of the world with more than billion population out of which two third living in the rural areas has public healthcare system the only source of hope to get their health needs. There is huge gap in provisioning of healthcare facilities and their qualities between the rural and urban setting. In urban area huge private sector along with better public health system catering the needs of the population, but in the

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rural area where the presence of private health sector is almost negligible is the major cause of concern for the policy makers and planners. To tackle the regional imbalance in development the decision making power has been decentralised to the grass root level through panchayati raj system. The two tier of three tier panchayati raj institution that is Block Development Council (BDC) and District Development Council (DDC) has been introduced recently in the state.

India has made remarkable economic progress in the last two decades, despite, commendable achievement in economic growth and development, its public healthcare spending is lagging behind other emerging economies (Chatterjee 2013). Consequently, the majority of Indians get their medical needs fulfilled by spending out of pocket (Doorslaer, et al. 2007).

It is more than a decade now the Government of India had brought several schemes under the umbrella programme National Rural Health Mission (NRHM) to provide primary health care services to the vast majority rural population of the country. Apart from this India is a signatory to several international commitments for instance Alma Ata Declaration (1978), to attain health for all through the primary health care approach. The immediate aftermath of Alma Ata declaration India had taken the initiative to improve its primary health care system through enhancing the number of health centres during the initial phase of the eighties substantially. Under NRHM, the Government applied the holistic and integrated approach to address the problem of unmet medical needs of the rural area. Indian Public Health Standard (IPHS) norms have been placed to ensure the minimum standard of healthcare services. Several programmes and schemes have been launched under NRHM especially for marginalised and disadvantaged group of population. For example, Janani Suraksha Yojana (JSY), Accredited Social Health Activist (ASHA) community health worker and Janani Shishu Suraksha Karyakaram (JSSK). Therefore, Provisioning of promotive, preventive, curative and rehabilitative services to the rural population is the major objective under NRHM. All these initiatives have been taken to improve the health of the rural population in general and maternal and child health care services in particular.

Just the existence of health centres are not sufficient or guarantee the delivery of required services to the rural population. Along with socio-economic accessibility, physical accessibility significantly determines the healthcare seeking behaviour. Physical access plays a significant role, especially in the hard to reach mountainous areas. Lack of road infrastructure accompanies with the unavailability of transportation facility at the health centres such as ambulance to carry serious patients home to the health centre, and between health centres are the major issue in the rural area. Several health centres don't have even basic essential facilities such as a regular supply of water, electricity and telephone. The existing public health system in a rural area has, therefore, become very unreliable and undependable for access to healthcare facilities, especially in an emergency case (KV and Dileep, 2005).

Objective- The main focus of this study is to explore the status of rural public healthcare system in Jammu and Kashmir.

Study Area- The present study includes the erstwhile state of Jammu and Kashmir which has been bifurcated into two union territories through Jammu and Kashmir state reorganisation act, 2019, i.e. Jammu and Kashmir and Ladakh.

Data Source and Methods- The necessary data have been collected from different sources like District Census Handbook (DCHB), Census of India 2011; Rural Health Statistics; National Health Profile Reports by MHFW, the Government of India.

Results

Rural Health Care System Norms in India- The public health care delivery system in India is divided into three levels, i.e. Primary, Secondary and Tertiary level. India is an agrarian country having two-third population is residing in the rural areas, whose health care needs are fulfilled by the three-tier rural health care system. Three-tier rural health care system constitutes Sub centre (SC), Primary Health Centre (PHC) and Community Health Centre (CHC).

Sub Centre is the widely distributed health facility and entry point to the health care system for the majority population. Major responsibilities assigned to the SCs are enhancing the interaction between communities and service providers to bring the behavioural change. SC provides promotive and preventive health services, such as maternal and child health care services (KV and Dileep, 2005). According to the IPHS guidelines, the SC has to cover 5000 population in plain and 3000 tribal population areas. A male and female health worker/ANM is required for the proper functioning of the SC.

At the subsequent level, PHC is the first point of contact for the community with the medical officer. The PHCs are supposed to provide integrated preventive and curative health care services. PHC is a four to six bedded health centre and referral unit for six SCs. An average rural population recommended to a PHC is 30,000 and 20,000 for plain and tribal/mountainous regions respectively. A medical officer is supported by 14 paramedical and other staff (IDFC 2014).

At the top of the three tier primary health care system comes the CHC which provides specialised services in the rural areas as per the IPHS guidelines, a Community Health Centre should have four medical specialists, i.e. physician, surgeon, gynaecologist and paediatrician supported by 21 paramedical and other staff (Majumder 2006). The CHC is a 30 indoor bedded facility with one operation theatre, X-ray, labour room and laboratory facilities. Community Health Centre serves as a referral unit for four PHCs and also provides the facility for obstetric care and specialist consultations (GOI 2015). Population norms for CHC are 120,000 for plain and 80,000 for mountain/tribal regions.

**Table 1 Population Norms as
Per Government of India for Health Centres**

IPHS Norms for Health Centre			
Health Centre	Average Rural Population		
	Urban/Plain area	Rural/Tribal/Hilly area	Jammu and Kashmir, 2015
Sub centre	5000	3000	3,150
Primary Health Centre	30000	20000	15,322
Community Health Centre	120000	80000	1,13,452

Source: Compiled by authors from Indian Public Health Standards for SCs, PHCs, and CHCs and Rural Health Statistics Report, 2015.

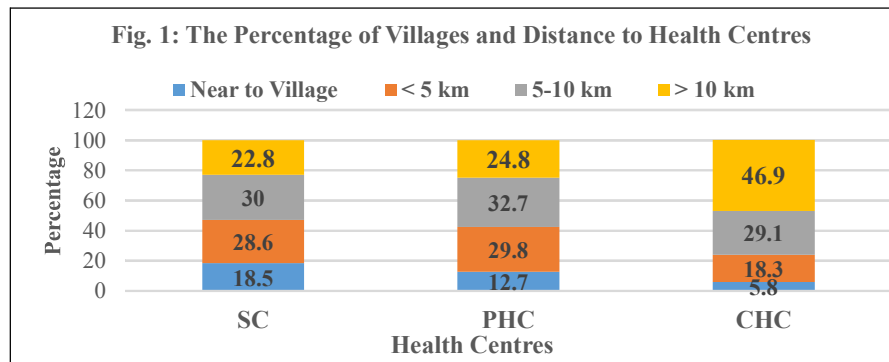
Physical Accessibility- Access to health centres varies across space because access to health care is affected by where health professionals are located (supply) and where people reside (demand), and neither health facilities nor population is uniformly distributed in rural areas (Luo and Fahui 2003). Distance to health centre is one of the major determinant of seeking healthcare services in general and particularly in hard to reach mountain area. The physical barriers poses by the mountainous terrain (i.e. distance and time taken to reach health facility) incurs heavy financial cost to the rural community. Despite the required number of health centres as per the IPHS guidelines are available in the state people have to travel long distance to get the first point of contact with the health system i.e. Sub Centre. More than one fifth villages in the state having facility of Sub Centre located at more than ten kilometres. PHC is the first point of contact between the villagers and the health care system, although, half of the villages in the state having PHC facility is at more than ten kilometres.

In addition to this, demographically the average rural population served by the different health centres is as per the IPHS norms in the state, the health centres cover the large geographical areas over the surface. The average number of villages covered by a health centre (SC = 03, PHC = 10 and CHC's = 78) is showing that the health centres are spatially scattered. Although, there is no data available from the Pakistan and China Occupied Kashmir (POK), but in the available data includes these area while finding out the average. The areal extent served by a health centre whether it is an average rural area (in sq. km.) or radial distance (in km.) is higher than national level. Therefore people have to travel long distance to access the healthcare services in the state which ultimately determines their healthcare seeking behaviour results into greater health risk.

Table 2: Physical Accessibility to Health Centres

	SC	PHC	CHC
Average Number of Villages covered by a	3	10	78
Average Rural Area [Sq. Km.] - covered by a	97.7	347.4	2634
Average Radial Distance [Km.] - covered by a	5.58	10.51	28.95

Source: Rural Health Statistics, Ministry of Health and Family Welfare, 2015.



Source: Computed From the Census of India, 2011.

Human Resources- Jammu and Kashmir is one of the eighteen high focussed states under NRHM. The percentage of the rural population is higher than the national level accompanied by low population density, and rugged topography Jammu and Kashmir is one of the least accessible states. Three-tier rural health care system caters to the medical needs of the rural population of the state. As the population is considered as the basic criteria to determine the required number of health centres and workforce, it becomes essential to assess the growth of health centres and required the workforce to function these centres appropriately over the period. The data from rural health statistics 2005, the year in which the National Rural Health Mission (NRHM) flagship programme was introduced to strengthen the rural health care system and 2015, after ten years of its implementation, has been undertaken to analysis.

Table 3 and figure 2 expounds, the required, inposition and shortfall in the health centres and workforce at these centres during the year 2005 and 2015 in rural Jammu and Kashmir. A number of the health centres in Jammu and Kashmir was substantially higher than the required in the year 2005, and 2015. There is no shortfall in health centres in the state.

Required number of Female health worker/ANM at SCs and PHCs increased over ten years of period. However, female health worker/ANM positioned at SCs and PHCs were insufficient, and numbers were less than required during the year 2005. In the year 2015, the number of female health worker/ANM amplified substantially from 2005, and it is surplus than the required number in position. Ideally, there should be a male health worker at every SC as per IPHS recommendations. However, in Jammu and Kashmir, more than three-fourth of the SCs have been functioning without a male health worker, and shortfall persists during this period. Despite, the inauguration of NRHM in 2005, the shortfall in male health worker has not been addressed, and situations prevail analogous as it was in the year 2005 (Table 3 and fig 2).

Preferably, a female health assistant and male health assistant should be available at the Primary Health Centres as per the IPHS guidelines. Even though the number of female health assistant/LHV at the PHCs have increased from the year 2005 to 2015. The shortfall in female health assistant/LHV has not addressed appropriately and persists despite

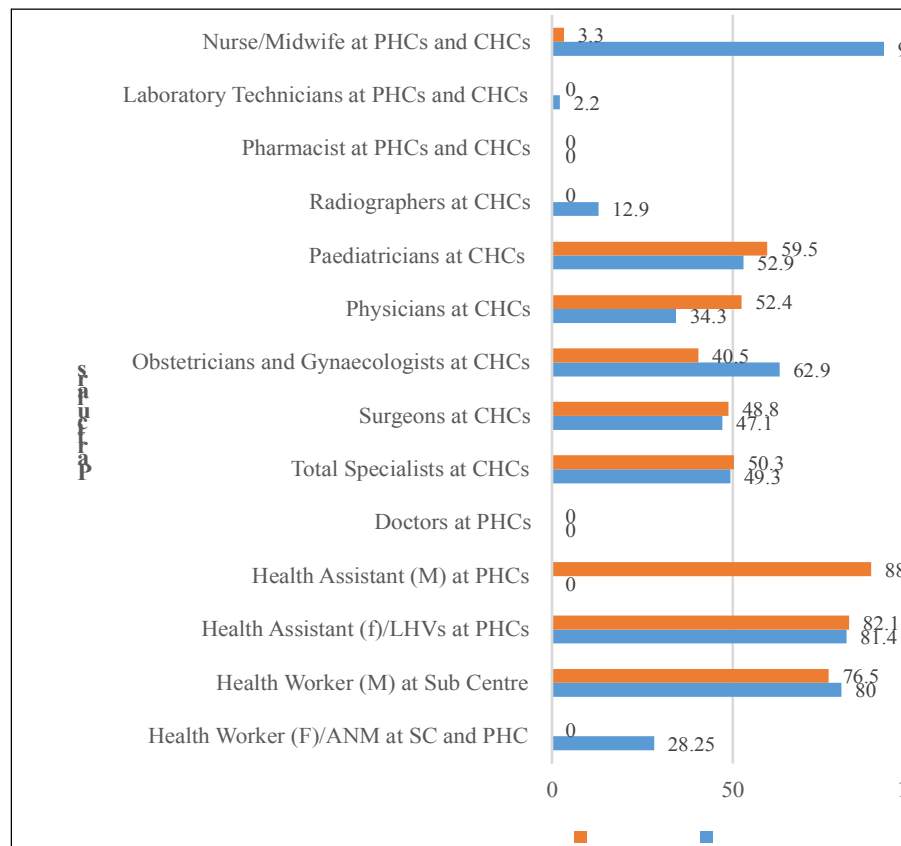
the introduction of NRHM, i.e. 81 per cent and 82.1 per cent during the year 2005 and 2015 respectively. There was no shortfall of male health assistant at the PHCs during the year 2005, but in the year 2015 there is 88.2 per cent of required male health assistants are not in positioned in the state (Table 3 and fig. 2).

Table 3: The Shortfall in health centres and human resources in Jammu and Kashmir, 2005 & 2015.

	2005-06		In Position (P)		Shortfall (R-P)	
Particulars	2005	2015	2005	2015	2005	2015
Sub-Centres	1176	2009	1879	2265	Surplus	Surplus
Primary Health Centres	196	327	334	637	Surplus	Surplus
Community Health Centres	49	81	70	84	Surplus	Surplus
Health Worker (F)/ANM at Sub Centre and PHCs	2213	2902	1588	4362	625	Surplus
Health Worker (M) at Sub Centre	1879	2265	377	531	1502	1734
Health Assistant (f)/LHVs at PHCs	334	637	62	114	272	523
Health Assistant (M) at PHCs	334	637	334	75	0	562
Doctors at PHCs	334	637	643	834	Surplus	Surplus
Total Specialists at CHCs	280	336	142	167	138	169
Surgeons at CHCs	70	84	37	43	33	41
Obstetricians and Gynaecologists at CHCs	70	84	26	50	44	34
Physicians at CHCs	70	84	46	40	24	44
Paediatricians at CHCs	70	84	33	34	37	50
Radiographers at CHCs	70	84	61	239	9	Surplus
Pharmacist at PHCs and CHCs	404	721	456	872	Surplus	Surplus
Laboratory Technicians at PHCs and CHCs	404	721	95	763	9	Surplus
Nurse/Midwife at PHCs and CHCs	824	1225	68	1184	756	41

Source: Rural Health Statistics, Ministry of Health and Family Welfare, 2005 and 2015.

**Figure 2: Human Resources Shortfall
at the Health Centres in Jammu and Kashmir, 2005 & 2015**



Source: Rural Health Statistics, Ministry of Health and Family Welfare, 2005 and 2015.

Ideally, according to the IPHS norms, there should be a doctor at every PHC. As the number of the PHC's in the state has increased over the period, the required several doctors in these PHCs also increased. The table shows that the doctors positioned at the PHC's in 2005 and 2015 are surplus than the required number in the state (Table 3 & Fig. 2).

The Community Health Centre provides health services at the secondary level, and it is at the top of the hierarchy in the primary rural health care system. The CHC provides specialised services, and it is the first point of contact for the rural population with a specialist. Preferably, a CHC must have a surgeon, an obstetrician and gynaecologist, paediatrician and physician. The number of total specialists required and in position has increased from the year 2005 to 2015 in Jammu and Kashmir. The total required specialists in the state during the year 2005 and 2015 are 280 and 336 respectively. However, the total specialists in a position substantially below the required number and they were 142 and 167 in 2005 and 2015 respectively. If we look at the shortfall figure, it is visible that around fifty per cent of the total required specialists are not in a position during the year 2005 and 2015 in Jammu and Kashmir (Table 3 & Fig. 2).

Nearly fifty per cent of the required surgeon at CHC's were not in a position in the year 2005, i.e. 47.1 per cent and 2015; it is 48.8 per cent in the state. It shows that shortfall in the availability of surgeon at CHC's marginally increases despite ten years of NRHM in 2015.

Obstetricians and gynaecologist are primarily concerned with maternal and child health care; their shortfall can cause unnecessary inconvenience for pregnant women at delivery. Despite, the government's numerous initiative to enhance the coverage of maternal and child health care services and institutional delivery, health centres have been suffering from a shortage of specialists persistently in the state. However, the shortfall in obstetricians and gynaecologist has declined from 62.9 per cent in the year 2005 to 40.5 per cent in 2015. Still, more than one-third of the CHCs are functioning without any obstetricians and gynaecologist in Jammu and Kashmir (Table 3 & Fig. 2).

The non-availability of the physicians at CHC's is another major concern. The shortfall of physicians has increased in Jammu and Kashmir over the ten years. In 2005, one third, i.e. 34.3 per cent of required physicians were not in a position in the state, but this shortfall enhanced in 2015, and more than fifty per cent of required physicians are not in a position in the state (Table 3 & Fig. 2).

In the case of the availability of paediatrician at CHC, 52.9 per cent and 59.5 per cent of CHCs in the year 2005 and 2015 respectively, has been functioning without paediatrician. Therefore, the shortfall in the availability of paediatrician in the state has increased slightly over the period.

There was a shortfall of 12.9 per cent in the required number of radiographers at the CHCs in the year 2005, but in 2015 there are surplus radiographers in the position. The requirement of pharmacists at PHCs and CHCs have increased with increasing health centres in the state. There was no shortfall in 2005 for pharmacists, and a similar situation also prevailed in 2015. Laboratory technicians are also surplus in position than required in the year 2015. The very high shortfall has been observed for nurse/midwife at PHC's and CHCs in the year 2005, i.e. 91.7 per cent which has declined in 2015 to just 3.3 per cent in Jammu and Kashmir (Table 3 & Fig. 2).

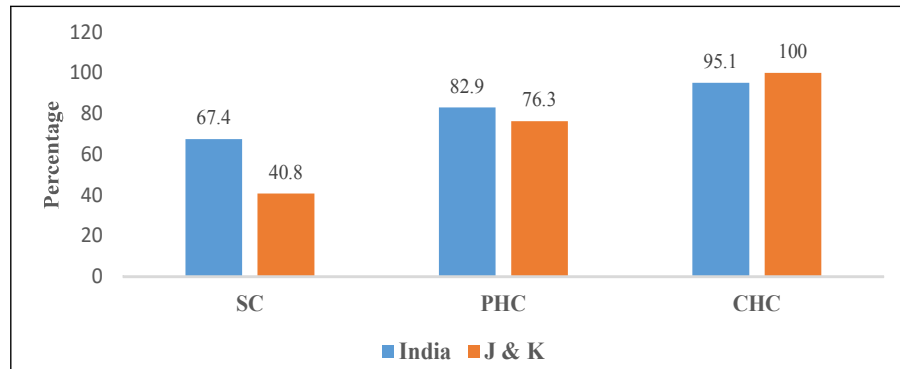
Physical Infrastructure- It has been found in the previous section that there is no shortfall in the number of required health centres in the state. Although in case of required human resources, the huge shortfall has been recorded especially for the specialist at the Community Health Centres in Jammu and Kashmir. Although the number of health centres increased tremendously in the state, most of these health centres are unequally distributed, people have to walk the long distance to meet their basic medical needs. Along with unequal distribution and shortfall in human resources, these health centres lack in basic maintenance and facilities, for instance, pucca Government building, regular supply of water and electricity, essential equipment and drugs.

Building Position- Health centre building is the first requirement for the smooth functioning of any health system. In rural India, many health centres don't have even the Government building, and they have been functioning in a rented building which are lacking in basic requirements for the functioning

of centres such as electricity and water supply. The evaluation of SCs by the National Council of Applied Economic Research (NCAER), Delhi revealed that SCs operating in rented buildings don't have a conducive working environment due to lack of space and equipment and furniture facilities (Satpathy and Venkatesh 2006).

Figure 3: The Percentage of Health Centres in Government Building, 2015

Source: Rural Health Statistics, Ministry of Health and Family Welfare, 2014-15.



As per rural health statistics data for the year, 2016 shows that around one-third of total Sub Centres don't have even government building in India and they are functioning in rented building or voluntary panchayat building. The percentage for PHCs and CHCs functioning in the Government building are 82.9 per cent and 95.1 per cent respectively in India (Figure 3).

On the other hand in Jammu and Kashmir situation is more pathetic where sixty per cent of SC's and one-fourth of PHC's have been functioning without the government building. However, all the CHC's in the state are functioning in the government building (Figure 3).

Facilities at Sub Centres- Sub centre is the most peripheral health centre providing preventing and promotive health services to the rural population. In Jammu and Kashmir, there is no shortage of sub-centre has observed and an average population covered by a Sub Centre is optimum as per the IPHS guidelines. However, the distance to an average rural area covered by the SC is higher in the state compared to the national level. This section will examine the availability of required facilities at the SC in Jammu and Kashmir.

Table 4 describes the percentage of Sub Centres having the availability of different sorts of basic facilities in Jammu and Kashmir. Availability of residential quarter at the health facility could improve the punctuality of staff at the health facility. Therefore, a living quarter for an ANM at the SC becomes essential. However, in Jammu and Kashmir, only ten per cent of SC's having quarter.

Moreover, only two-third of SC's having quarter are actually in use where ANM have been living in the state. Surprisingly, in Jammu and Kashmir, there is no SC functioning as per the IPHS norms (Table 4).

**Table 4 Availability of facilities
at Sub Centres in Jammu and Kashmir, 2015**

Particulars	J & K	
	Number	Percentage
Number of SCs Functioning	2265	
SCs with ANM quarter	227	10
SCs with ANM living in SC Quarter*	154	67.8*
SCs Functioning as per IPHS Norms	NA	NA
SCs without Regular Water Supply	1290	57
SCs without Electricity	1013	44.7
SCs without All-weather Motorable Approach Road	672	29.7

Source: Rural Health Statistics, Ministry of Health and Family Welfare, 2014-15.

A very high percentage of SCs in Jammu and Kashmir are functioning without regular water supply, i.e. 57 per cent and without electricity 44.7 per cent.

Primary Health Centre- Primary Health Centre is the first point of contact for a rural population with the medical officer. The PHC is more sparsely located health centre compared to the Sub Centre. As it has been seen earlier in this chapter that around one-fourth of PHCs in Jammu and Kashmir are functioning in a rented building without any Government building. It becomes essential to understand the provision of PHC and the facilities required at these health centres in Jammu and Kashmir.

Facilities at Primary Health Centres- The primary health centre is functioning as the intermediary between the Sub Centre (SCs) and the Community Health Centre (CHCs) in the primary health care system in rural areas. There was no shortfall in the required number of PHCs and the doctors at the PHCs in Jammu and Kashmir as discussed before. Nevertheless, the large number of PHCs in the rural areas still lack in basic essential facilities like labour room, operation theatre, beds, electricity and regular water supply.

Table 5 illustrates, the percentage of Primary Health Centres having or not having the availability of the required basic health infrastructure in Jammu and Kashmir. According to IPHS norms, PHC must have a labour room to cater to women in rural areas who come to delivery at a health facility. Just fifty percent of the PHC in the state having labour room and the remaining PHCs are functioning without the facility of labor room. In case of availability of operation theatre at PHC in the state display very discouraging figure and just two percent of PHCs having operation theatre. Three fifth of PHCs having recommended at least four beds and two fifth are functioning without recommended beds in the state. Substantial number of PHCs are functioning without regular supply of water and without electricity i.e. 14.8 percent and 12.7 percent respectively (Table 5).

Physical accessibility to the health facilities in rural areas accompanied by rugged topography and least road density is one of the major challenges to address in Jammu and Kashmir. There is a large number of facilities in rural Jammu and Kashmir which do not connect with the all-weather motorable road. Several PHCs in the state are functioning without any facility of all-weather approachable road and it is 15.4 percent.

Non-availability of essential facilities like telephone and computer at the health centre could be inconvenient at the time of emergency. The majority PHCs in the state have been functioning without an important basic facilities such as telephone and computer.

Table 5 Availability of facilities at Primary Health Centres at the National Level and in Jammu and Kashmir, 2015.

Particulars	J & K	
	Number	Percentage
Number of PHCs Functioning	637	
PHCs With Labour Room	328	51.5
PHCs With Operation Theatre	13	2
PHCs With At least 4 Beds	384	60.3
PHCs Without Electricity	81	12.7
PHCs Without Regular Water Supply	94	14.8
PHCs without All-weather Motorable Approach Road	98	15.4
PHCs With Telephone	97	15.2
PHCs With Computer	120	18.8
PHCs With Referral Transport	362	56.8
PHCs With RKS	615	96.5
PHCs Functioning as per IPHS Norms	NA	NA

Source: Rural Health Statistics, Ministry of Health and Family Welfare, 2014-15

A very high percentage of PHCs in rural areas are functioning without any facility of the referral system. In case of emergency non-availability of referral system could be fatal to a patient who reaches the health facility at a crucial stage. The percentage of PHCs having facility of referral system shows that more than forty per cent of PHCs are functioning without any referral system in Jammu and Kashmir (Table 5).

The Government of India, under the ministry of health and family welfare, have launched NRHM in 2005. To make health facilities more accountable and efficient introduced a scheme Rogi Kalyan Samities (RKS) under NRHM. The major insight behind this scheme is to improve the service provision and the functioning in public health facilities, enhance accountability and increase participation (GOI 2015). Most of the PHCs in the state having this facility. Interestingly, no Primary Health Centre (PHC) in Jammu and Kashmir is currently functioning according to the IPHS norms guidelines

Facilities at Community Health Centres- In the preceding discussion, it has been discussed that the distance from the village to a CHC where specialised health care services are available in Jammu and Kashmir is a major challenge to reach. More than ten kilometres of distance from a village to a health facility in an area where transport and road infrastructure is not favourable with rugged topography is more than enough to determine the healthcare seeking behaviour of a person. Besides this large number of CHCs in the state are functioning without their full potential, because of the shortage of human resources, required physical infrastructure, equipment and drugs. Therefore, this section will deal with the availability of required facilities at CHC in Jammu and Kashmir in detail.

Table 6 explain the number and the percentage of CHCs having recommended and essential facilities in Jammu and Kashmir. In Jammu and Kashmir, more than one-third of CHCs having all four specialists in position. It displays that there is a huge shortage of specialists at CHCs which should be addressed appropriately.

**Table 6 Availability of facilities at
Community Health Centres in Jammu and Kashmir, 2015**

Particulars	J & K	
	Number	Percentage
Number of CHCs Functioning	84	
CHCs With All Four Specialists	29	34.5
CHCs With Computer Statistical Asst. For MIS/Accountant	60	71.4
CHCs With Functional Laboratory	84	100
CHCs With Functional Operation Theatre	67	79.8
CHCs With Functional Labour Room	84	100
CHCs With Functional Stabilization Units for New-born	76	90.5
CHCs With New-born Care Corner	67	79.8
CHCs With At least 30 Beds	56	66.7
CHCs With Functional X-Ray Machine	82	97.6
CHCs With Quarters for Specialist Doctors	44	52.4
CHCs With Specialists Doctor Living in Quarters	36	42.9
CHCs With Referral Transport Available	84	100
CHCs With Registered RKS	84	100
CHCs Functioning as Per IPHS Norms	0	0
CHCs Having a Regular Supply of Allopathic Drugs For Common Ailments	84	100
AYUSH Drugs for Common Ailments	40	47.6

Source: Rural Health Statistics, Ministry of Health and Family Welfare, 2014-15.

Functional operation theatre in the CHC is an essential component of the health centre. However, one-fifth of CHCs in Jammu and Kashmir are functioning without functional operation theatre, and the percentage of CHCs having operational theatre is 79.8 per cent. All the CHCs in Jammu and Kashmir have functional labour room. Community Health Centre should have at least 30 beds. However, the percentage of CHCs having at least 30 beds in Jammu and Kashmir is 56 per cent means 44 per cent of existing CHCs in the state are functioning without the recommended capacity of beds. In the case of availability of functional X-Ray machine in Jammu and Kashmir almost every CHC having this facility (Table 6).

One of the major challenges the Indian health system is coping with is to retain the workforce at health centres in rural areas. Because, in the rural areas due to lack of modern facilities like better school, road connectivity, availability of consumable goods and above all less incentive discourage staff to serve in rural areas. A CHC should have a residential facility for staff. The large number of CHCs in rural Jammu and Kashmir have been functioning without any residential quarter facility for specialist doctors and the number of specialists living in available residential quarter is even lesser than this (Table 6).

All the Community Health Centres are having the availability of

referral transport, registered with RKS and regular supply of allopathic drugs for the common ailment in Jammu and Kashmir. Surprisingly, in Jammu and Kashmir, there is not a single CHC functioning as per the Indian Public Health Standard (IPHS) norms guidelines (Table 6).

Discussion- Jammu and Kashmir is one of the eighteen high focused states under NRHM. There is a large network of health centers spread across the nook and corner of the state and there is no shortage of required health centers. But we need is to strengthen the trust between the communities and healthcare system. Because trust deficit towards the public healthcare system along with poor condition of health infrastructure and high shortfall in human resource should be the major cause of concern among the policy makers. To seek a treatment for even a minor ailment people have to walk long distance in rural area of the state. Although, the average population covered by a health center in the state is above the recommended norms. But the average rural area and radial distance covered by a health center in the state still high. Several health centers have been functioning without any government building especially around sixty percent of the existing Sub centers in the state and one fifth Primary Health Centre. Despite, the substantial growth and surplus health centers exist in the state the majority rural population are seeking healthcare services from the unregulated private sector health facilities. Health infrastructure in rural areas of the state are in pathetic situation lacking in basic facilities required to decent functioning of health centers. Deteriorated situation of health Centre discourage the people for seeking treatment.

Rural healthcare system have been struggling with shortfall in human resources before and after ten years of introduction of National Rural Health Mission (NRHM). Although the number of health centres has increased tremendously after the inauguration of NRHM. But mere availability of health centres is not enough to make the health services accessible, and affordable. The required number of human resources for the proper functioning of health centres is a precondition for an efficient and accountable health care system. There are several health centres in the rural areas which have been functioning without the required minimum number of workforce in Jammu and Kashmir.

According to the Indian Public Health Standards (IPHS) guidelines, the Sub-Centre should have a female health worker/ ANM and a male health worker. There was no shortfall of required ANM at SCs and PHCs recorded in Jammu and Kashmir as per the latest estimates, although it was more than one fourth earlier during the year 2005. There was a huge shortfall in the required number of male health workers at the SC's, and more than three fourth of the required male health workers posts were not in a position, and it had been persisting since before the inauguration of NRHM. There was no shortage of required doctors at the PHCs observed in Jammu and Kashmir. Even the number of doctors in position in the state was surplus to the required numbers as per the IPHS guidelines. However, more than eighty per cent of the required male and female health assistants were not in the position, and the shortfall had been persisting since the pre NRHM period in

Jammu and Kashmir.

Community Health Centres provide specialised services to the rural population. According to the IPHS norms, the CHCs should have at least four specialists, i.e. Surgeon, Obstetrician and Gynaecologist, Physician and Paediatrician. In Jammu and Kashmir, fifty per cent of the total required specialists for the existing CHCs were not in the position, and the shortfall had been persisting for the last decade. It was found that forty per cent of the required Obstetricians and Gynaecologists for the existing health centres who deal particularly with pregnancy, intrapartum and postpartum services and the reproductive system of the women were not in the position in Jammu and Kashmir. However, the shortfall had declined since the year 2005, more than twenty percentage point from more than sixty per cent to forty per cent in the year 2015. Another staff which deals especially with pregnant mothers at the time of delivery is Nurse/Midwife at PHCs and CHCs. There was a huge shortfall in the required number of Nurse/Midwife for the existing health centres before the inauguration of NRHM, i.e. 91.7 per cent in the year 2005. Although it was addressed appropriately after the commencement of NRHM and in the latest estimate, it was just 3.3 per cent shortfall in the required number of Nurse/Midwife in Jammu and Kashmir. Apart from the requirement of human resources, health centres require sufficient physical infrastructure to address the challenges of providing health services to the rural population. Weak physical infrastructure at the health centres and non-availability of essential facilities, for example, drugs, equipment and residential quarters for staff are the major determinants of seeking health care services and absentee of staff in rural areas. Lastly, there was no health centre, whether it was Sub Centre, Primary Health Centre or Community Health Centre in Jammu and Kashmir which fulfilled the criteria of Indian Public Health Standards Guidelines.

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The Consumer protection law and its challenges for the future in India

•Arti Shukla

Abstract- *Indian Consumer Protection Act, 1986 as it was Enacted to provide timely relief to the consumers affected by the defect In addition to providing both, The products and faulty services Legal and institutional framework for protection of consumption rights were criticized for being ineffective on some fronts, on the other hand, increase in cases of unfair trade practices .*

Keywords- *Consumer protection, law, challenges*

Introduction- The digital age has ushered in this new era of e-commerce and has evolved tremendously and brought in new expectations and desires of the consumers. It has now become easily accessible to the consumers with wide options and offers effective ways of doing business. In India government policy According to Article 38 of the Indian Constitution, the State shall ensure a social security order to promote the welfare of the people and will work effectively to achieve a "The social order in which justice, economic and political, shall inform all institutions" national life.

The Consumer Protection Act 1986 was born when consumers were exploited. The bill for Consumer Protection Act was placed in the Parliament of India on 9 December 1986 which was also successfully passed. On 24 December 1986, the President of India gave his assent to the Consumer Protection Act 1986 and it came into force all over India. Amendments have been made from time to time in the Consumer Protection Act 1986. The new act has replaced the old Act is called 2019. It has come into effect from 20 July 2020. Changes necessitated due to practices and deceptive advertising Law. The Consumer Protection Act, enacted in 2019, aims to take stringent measures so that consumers can be effectively protected.

The Consumer Protection Act, 1986 had several challenges and faced several setbacks that required immediate attention. But the government brought about drastic changes and introduced the Consumer Protection Act, 2019, which came into force on 20 July 2020. This earlier act was amended from time to time to bring in line with the changes brought about by globalization, economic liberalization. Digitization of products and services etc. However, its implementation went a long way in achieving its desired objective of socio-economic legislation, which sought to protect the interests of consumers. On the other hand, the new Consumer Protection Act, 2019 will strengthen and enhance the scope of protection provided to consumers by improving advertising claims, endorsements, penalties, jail terms, administration of disputes and various other factors.

Consumer Protection Act, 2019

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The Consumer Protection Act, 2019 is an Act that provides for effective protection of the interests of consumers, resolution and speedy resolution of disputes with the help of various councils and other authorities. Broadly speaking, the Consumer Protection Act seeks to protect the following basic rights of consumers:

1. Rights against the marketing of goods and services dangerous to life and property;
2. The right to be informed about the quality, quantity, potency, purity, standard and price of goods or services;
3. The right of choice, wherever possible, through access to a variety of goods and services at competitive prices;
4. Right to be heard and assured that the interests of consumers will be properly considered at appropriate forums;
5. Right to seek redressal against unfair trade practices or restrictive trade practices or dishonest exploitation of consumers;
6. Right to Consumer Education; And
7. Right to clean and healthy environment.

Further, the Consumer Protection Act elaborates on who the consumer is, their rights as mentioned above. In addition, there are detailed provisions relating to the administration and settlement of consumer disputes through a three-tier quasi-judicial mechanism at the district, state and national levels for redressal of consumer disputes and complaints. Depending on the facts and circumstances, the Redressal Forum may issue an order for relief on one or more of the following:

1. Removing defects from the goods;
2. Replacement of goods;
3. Refund of the price paid;
4. Award of compensation for loss or injury;
5. Return of dangerous goods from being offered for sale;
6. Reward the parties for a substantial cost.
7. Correcting defects or deficiencies in the Services;
8. Discontinue unfair trade practices or restrictive trade practices or direct them not to repeat them;

Who is a Consumer- Under the new Act, "consumer" has been defined as a person who "purchases any goods" and "rents or receives any service" but does not include a person who Receives goods for resale or goods or services for any commercial purpose. In consumer protection Act 2019 definition of consumer 2 (7) "consumer"

Means any person who—

(i) buys any goods for a consideration which has been paid or promised or partly paid and partly promised, or under any system of deferred payment and includes any user of such goods other than the person who buys such goods for consideration paid or promised or partly paid or partly promised, or under any system of deferred payment, when such use is made with the approval of such person, but does not include a person who obtains such goods for resale or for any commercial purpose; or

(ii) hires or avails of any service for a consideration which has been paid or promised or partly paid and partly promised, or under any system of deferred payment and includes any beneficiary of such service other than the person who hires or avails of the services for consideration paid or promised, or partly paid and partly promised, or under any system of deferred payment, when such services are availed of with the approval of the first mentioned person, but does not include a person who avails of such service for any commercial purpose.

Explanation - For the purposes of this clause,—

(a) The expression "commercial purpose" does not include use by a person of goods bought and used by him exclusively for the purpose of earning his livelihood, by means of self-employment;

(b) The expressions "buys any goods" and "hires or avails any services" includes offline or online transactions through electronic means or by teleshopping or direct selling or multi-level marketing

The salient features of the Act are as follows:

(i) The Act provides for setting up of a three-tier consumer dispute redressal mechanism at the national, state and district levels.

(ii) It applies to all goods and services.

(iii) It includes all sectors, whether private, public or any individual.

Consumer Courts- In Act allows the consumer to file a complaint from where they live or work for profit? This has brought great relief to the consumers as earlier complaints were lodged only where the seller or service provider was located or where the cause of action was taken. This move is considered appropriate considering the growing e-commerce where the service provider can be located anywhere.

Economic Jurisdiction- There has been a tremendous and paramount change in the economic jurisdiction of the courts dealing with consumer disputes. In view of the new Act, the District Commission can now consider consumer disputes whose value does not exceed Rs. 1 crore. The State Commission may consider disputes whose value exceeds Rs. 1 crore but does not exceed Rs. 10 crores and the National Commission may consider disputes whose value exceeds Rs. 100 million.

Product Liability- In the provision of additional product liability under which manufacturers or service providers are made liable to compensate the consumer for any loss, injury, damage caused by defective products, or deficiency in service. This also includes e-commerce and even they cannot escape the wrath of this act as now the product liability has been extended to the service providers and not limited to the manufacturers only.

Future challenges for consumers- The Central Consumer Protection Authority (CCPA) has been set up to promote, protect and enhance consumer rights. Headquarters will be in NCR and regional offices will be decided by the government. The authority will control consumer rights violations, unfair trade practices and misleading advertisements. It will be dedicated work for the government to implement and enhance this authority and its implications will certainly be very significant for the 2019 Act. While this is a laudable initiative, it is not clear how this authority will

function and perform certain functions related to investigation and inquiry. There is an overlap between the functions of the Director General when considering the investigative wing and the search and seizure functions. The CCPA is empowered to order withdrawal of goods, reimburse the price and issue directions and penalize the manufacturers or endorsers. Interestingly, appeals against such orders can be made only before the National Commission. The circumstances or criteria under which the National Commission would consider such cases are unclear. It is not clear whether the existing cases will be transferred due to the change in economic jurisdiction. However, there is speculation that only new cases will come under the new jurisdiction.

Some case:

1. In Gopi Ram Goel et al., Vs. National Institute of Heart and Ors., 2001 CTJ 405 (CP) (NCDRC), The National Commission held that where the records and evidence show the conduct of the opposing parties the doctors were more than reasonable and the level of care was as expected from a professional Using an appropriate degree of skill and knowledge. Though the complainant failed to prove any of the cases Negligence on the part of doctors, hence the doctor cannot be held responsible for the death of the patient.
2. Bhupendra Jung Bahadur Guna Vs. Regional Manager & Others (Second 1995 CPJ 139), National The Commission held that a tractor is primarily bought and hired on rent till the buyer's land. The free time will not be used commercially for the land of others.
3. In Morgan Stanley Mutual Fund Vs Karthik Das (1994) 3 CLJ 27, the Supreme Court held that an application Goods cannot constitute for the allotment of shares. This is after allotment, rights may arise as per the articles of Company's Association. There is no purchase of goods for consideration at the application stage and again the purchaser cannot be said to be the tenant of the services for consideration.
4. Alex J. In the case of Rebello v. Vice-Chancellor, University of Bangalore and others, 2003 CTJ 575 (CP) (NCDRC) National Commission has held that universities are responsible for conducting examinations, evaluating was not doing any service for consideration of publication of answer sheets and result and a candidate The person appearing in the examination cannot be treated as a consumer.

Conclusion- The Consumer Protection Act 2019 is a constructive step which will bear fruit in future. The act itself contains many new concepts which were the need of the hour and the idea of implementing it in a country like India would give a satisfactory result. Steps like e-filing of cases, proceedings through video conferencing will improve, develop and enhance consumer rights to a great extent in the growing world of digitisation. But one cannot deny and question the implementation and practical application of the provisions. For the success of any law, it is necessary that it is

implemented properly and efficiently. Therefore, the 2019 Act needs to address its shortcomings to become productive and relaxations should be given to materialize relief for consumers.

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**Impact of Mental Imagery Training on
Anxiety and Self Confidence of Female Basketball
Players Participate in the Inter University Level**

• Reena Walia

Abstract- *The purpose of the study was to see the impact of mental imagery training in moderating the level of anxiety and building of self confidence of female football players. The subjects selected for the study were female national level Basketball players, the age group of subjects were ranges between 18-25 years. Two groups of 30 players were selected for the study. First group of 30 players is experimental group and the other group of 30 players is control group. Control group was established by the research scholar to see the effectiveness of training programme. After taking pre test, six weeks mental imagery training was given to the experimental group, after the completion of training programme post test was carried out. Sports competitive anxiety test (SCAT) constructed by Rainer Martens was used as a tool to assess the anxiety level of subjects and self confidence inventory constructed by Robin S Vealy was used as a tool to assess the confidence level of subjects. T- test (paired) was used as a statistical technique for the interpretation of collected data. The significance of T- test (paired) was tested at .05 level of confidence.*

Keywords- *Mental Imagery, Anxiety and Self Confidence*

Introduction- Mental imagery (sometimes referred to as “visualizing,” “seeing in the mind's eye,” “hearing in the head,” “imagining the feel of,” etc.) is *quasi-perceptual experience*; it resembles perceptual experience, but occurs in the absence of the appropriate external stimuli. It is also generally understood to bear *intentionality* (i.e., mental images are always images of something or other), and thereby to function as a form of mental representation. Traditionally, *visual* mental imagery, the most discussed variety, was thought to be caused by the presence of picture-like representations (*mental images*) in the mind, soul, or brain, but this is no longer universally accepted (Altchek D.W. 2004).

Imagery experiences are understood by their subjects as echoes, copies, or reconstructions of actual perceptual experiences from their past; at other times they may seem to anticipate possible, often desired or feared, future experiences. Thus imagery has often been believed to play a very large, even pivotal, role in both memory and motivation. It is also commonly believed to be centrally involved in visual-spatial reasoning and inventive or creative thought. Indeed, according to a long dominant philosophical tradition, it plays a crucial role in *all* thought processes, and provides the semantic grounding for language. However, in the 20th

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century vigorous objections were raised against this tradition, and it was widely repudiated. More recently, it has once again begun to find a few defenders.

Mental Imagery plays an important role in sports, it is closely related with the sports performance. It is frequently used by athletes and coaches to familiarize the athlete with a competition site, a race course, a complex play pattern or routine etc. Motivate the athlete by recalling images of their goals for that session, or of success in a past competition or beating a competitor in competition. Perfect skills or skill sequences the athlete is learning or refining. **Reduce negative thoughts** by focusing on positive outcomes. Refocus the athlete when the need arises e.g. if performance is feeling sluggish, [imagery](#) of a previous best performance or previous best event focus can help get things back on track. See success where the athlete sees themselves performing skills correctly and the desired outcomes. Set the stage for performance with a complete mental run through of the key elements of their performance to set the athlete's desired pre-competition feelings and focus.

Anxiety is a [psychological](#) and [physiological](#) state characterized by [somatic](#), [emotional](#), [cognitive](#), and [behavioral](#) components (John M. Silva III and Robert S. Weinberg 1984). It is the displeasing feeling of fear and concern. In either presence or absence of psychological stress, anxiety can create feelings of fear, worry, uneasiness, and dread. However, anxiety should not be confused with fear, it is more of a dreaded feeling about something which appears intimidating and can overcome an individual. Anxiety is considered to be a [normal](#) reaction to a [stressor](#). It may help an individual to deal with a demanding situation by prompting them to cope with it. However, when anxiety becomes overwhelming, it may fall under the classification of an [anxiety disorder](#). Anxiety is a very critical factor related to the sports performance. Moderate level of anxiety is essential for achieving peak performance in sports.

Self-confidence in sports relies primarily on the athlete's ability to believe he can win and that he can be successful in his efforts. Consultants at the United States Tennis Association report that self-confidence is one of the most important attributes an athlete can possess and should be fostered by both athletes and their coaches. While self-confidence originates within the player, athletes must surround themselves with positive role models and supporters to keep up their internal self-talk. Athletes can look for inspiration in a number of arenas and use positive strategies to maintain their upbeat attitudes. Retired athletes, spiritual advisers, coaches and training partners all can provide positive support and reinforcement. The significance of training cannot be underplayed when it comes to building self-confidence.

The most effective self-confidence is based on reality that is formed by practice and training. Extensive training to overcome weaknesses builds

confidence. Trophies, ribbons and other positive outcomes add to the level of confidence an athlete is capable of building. Continued success breeds self-confidence. There is a wealth of benefits that come from healthy self-confidence. Self-confidence is a tool that can help you manage your fears, tackle life's challenges with more certainty and maintain a positive mental attitude. Self-confidence is typically based on past experience, and improves as you build up a repertoire of success on which to rely.

Methodology

The purpose of the study was to see the influence of mental imagery training in moderating the level of anxiety and building of self confidence of female Basketball players. The subjects selected for the study were female interuniversity level football players, the age group of subjects were ranges between 18-25 years. Two groups of 30 players in each group are selected for the study. First group of 30 female Basketball players was experimental group and the other group of 30 female Basketball players was control group. Control group was established by the research scholar to see the effectiveness of training programme. After taking pre test of both the groups scholar gave six weeks mental imagery training to the experimental group whereas the control group was not undergone any type of treatment. The intensity and specificity of the mental imagery training programme is progressive in nature. After the completion of training programme post test was carried out. Sports competitive anxiety test (SCAT) constructed by Rainer Martens was used as a tool to assess the anxiety level of subjects and self confidence inventory constructed by Robin S Vealy was used as a tool to assess the confidence level of subjects. T- test (paired) was used as a statistical technique for the interpretation of collected data. The significance of T- test (paired) was tested at .05 level of confidence.

Findings-

Table :1
Significance of Difference between Pre Test and Post
Test Means of Anxiety in Experimental Group

Pretest Means	Post-test Means	D.M.	T-Ratio
16.2	19.8	3.6	8.47

Significant at .05 level $t_{.05}(29) = 2.04$

Table I: Indicates that the calculated value of t is 8.74 and tabulated value of t at .05 levels is 2.04. Hence it indicates that significant difference was found between the pretest and post test scores, which shows that mental imagery training was effective in moderating the level of anxiety of female Basketball players of experimental group.

Table: 2
Significance of Difference between the Pre Test and Post Test
Means of Anxiety in Control Group

Pretest Means	Post-test Means	D.M.	T-Ratio
17.4	17.7	0.3	1.76

Significant at .05 level $t_{.05}(29) = 2.04$

Table II indicates that the calculated value of t is 1.76 and tabulated value of t at .05 level is 2.04. Hence it indicates that there is no significant difference found between the pretest and post test scores, which shows that the control group was not effective in moderating the level of anxiety of female Basketball players of control group.

Table :3
Significance of Difference between the Pre Test and
Post Test Means of Self Confidence in Experimental Group

Pretest Means	Post-test Means	D.M.	T-Ratio
26.1	29.4	3.3	8.43*

Significant at .05 level $t_{.05}(29) = 2.04$

Table III indicates that the calculated value of t is 8.43 and tabulated value of t at .05 level is 2.04. Hence it indicates that significant difference were found between the pretest and post test scores, which shows that mental imagery training improve the level of confidence of female Basketball players of experimental group.

Table :4
Significance of difference between the pre test and post test means
of self confidence in Control Group

Pretest Means	Post-test Means	D.M.	T-Ratio
25.4	25.8	0.4	0.93

Significant at .05 level $t_{.05}(29) = 2.04$

Table IV Indicates that the calculated value of t is 0.93 and tabulated value of t at .05 level is 2.04. Hence it indicates that there is no significant difference between the pretest and post test scores, which shows that there was no improvement was seen in the level of confidence of female Basketball players of control group.

Statistical interpretation of collected data clearly reveals that the mental imagery training programme was improve the level of confidence of female football players and also moderating the level of anxiety of female Basketball players.

Discussion and Findings

It is clear from the finding that mental imaginary improves confidence of female football players and moderate the level of anxiety. This may rise because sports psychologist have more recently argued that imagery also work through developing and refining psychological skill and the psychological skill hypothesis would predict that imagery can improve concentration, reduce anxiety, and enhances confidence (Jerry R

Thomas & Jack K Nelson 2001).

All important psychological skill for maximizing performance. For e.g. several intervention techniques (Stress management training, which focuses primarily on reducing or coping with anxiety) employ imagery as a key component. People visualize themselves successfully coping with stress in tough situations. A golfer, for e.g., might visualize himself standing over a 10 foot put that would win a tournament. In the past, he has tightened up and missed. Now, in his mind, he watch himself taking a deep breath and relaxing his muscles as he goes through his pre short routine. With a relaxed body and mind, he visualizes sinking the put and winning the tournament.

When an athlete start visualizing what you want to do and how you want to react in certain situation, you can prevent your mind wondering. You can imagine yourself in a situation in which you often lose your concentration and confidence, in that particular stage imagery makes an athlete composed and focused on the next play or step. Imagery can be used both to create higher level of arousal (e.g. that “pumped up”) If an athlete feel lethargic and to reduce anxiety if an athlete gets too “uptight”. As per the advantages imagery also used for relaxation before important games when player stand to get too pumped and play out of control. All of the above utility of mental imagery helps an athlete to control their arousal level and improve the concentration and confidence to achieve higher level of confidence.

The qualitative part of this study added appreciable depth to understanding how different athletes experience selected psychological skills. One of the strength points of the study was its applicability to other areas of the athletes' lives. As can be understood from their subjective evaluations, athletes mentioned how they felt the program helped them in their studies, relations with others, and approach to life in general. They also mentioned how they valued the interventions sessions and enjoyed knowing with each other closer and with a researcher to learn concepts and techniques and to express feelings about tensions in their sports and real life situations.

Present study's intervention duration was six weeks. There are some studies with same duration but sport psychology literature advice to design at least 3 months and longer duration for mental imagery training to find meaningful difference in findings. Also, according to qualifications of team environment and opinions of other staff (coach, manager, etc) different skills (concentration, motivation, pep-talk, coping and stress appraisal etc.) can use to reveal affects T on personal and performance development in sport environment.

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A Study of Academic Stress among School Students

• **Manoj Kumar Singh**

Abstract- *The research was conducted to study the academic stress among school students. For this purpose, 250 senior secondary school students were purposively taken as a research sample from different five senior secondary schools located in Saran district area. The age range of samples were from 14 years to 16 years with an average age range of 15 years. The academic stress scale developed by Abha Rani Bist was administered upon research sample. Self Prepared Personal Data Sheet was also used to collect some background informations regarding respondents. The collected data were analyzed with t-test method and prepared result. The findings revealed that (i) Girls students were more academic stressed than their counterpart boys students. (ii) The students of Science faculty were found more academically stressed than their counterpart students of Arts faculty. (iii) There were significant difference between students of English and Hindi medium schools students. In this regard students of English medium students were found academically more stressed while students of Hindi medium were found comparatively less academically stressed and (iv) Inhabitational related (rural-urban) factor were too found significant effector of academic stress students. In this regard urban students found more academic stressed.*

Keywords- *Study, Academic, Stress, Among, Students.*

Introduction- Students are the future of any country, where society prepares them as per their need through imparting education to them, therefore education is most for their participation and overall success. But today the meaning of education is fully changed and it become a source of income in the view of common individuals.

Today in the highly competitive world, students face various academic problems like examination in institutioes and academic success academic stress involves mental distress regarding anticipated academic challenge or failure or even the fear of the possibility of in many aspects of the student's environment. At school, at home, in their peer reations and even in their neighbourhood. Excessive level of academic stress can result in an increased prevelence of psychological and physical problems like depression, anxiety, nervousness and stress related disorders. Which can effect the academic achievements.

Several research reviwis in the fields are indicated that academic stress among students recognise as a positive condition for their academic success. The academic stress largely depend upon different factors like familiar, economical, psychological etc.

Many studies related to academic stress problem conducted.

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According to Anand and Devi (2012) conducted a study on academic stress in relation to self-efficacy and peer relations among college students and found that academic stress was significantly negatively related with self-efficacy and peer relations. Baviskar et al. (2013) found in their study that students of rural areas are vulnerable to depression, anxiety and stress. Tina and Annayat (2014) found in their study that there exists significant difference in level of academic anxiety among adolescents in relation to gender basis. Prabhu (2015) studied the academic stress among higher secondary students and found that higher secondary students are having moderate level of academic stress. The male student's academic stress is higher than female students. The urban student's academic stress is higher than rural students. In another study Ghosh (2016) students of private schools has more academic stress than their counterparts in government schools and female students were experienced higher level of academic stress than male students. Bhargava (2020) found in their study that students enrolled in science and commerce streams are exposed to a variety of stress including situations which may increase the

level of stress particularly in academics. Chandan and Shivappa (2020) had studied the academic stress among higher secondary school students and found that support system and conducive environment is much required for the students to advance in their academic life and for reaching greater heights and goals.

Purpose of the study- The main purpose of the research was to study the academic stress of senior secondary school students.

Objectives of the study- The main hypothesis of the study were as follows :

- I. There would be significant difference between boys and girls respondents in term of their academic stress measures.
- II. There would be significant difference between students of Science and Arts stream in term of their academic stress measures.
- III. The academic stress would be significantly differed between English medium and Hindi medium students.
- IV. The inhabitational factor would be significant effector of respondents in terms of their academic stress measures.

Methodology :

I. Sample- Total 250 senior secondary students were taken as a research samples from different senior secondary schools located in Saran district areas. The age range of research samples were from 14 years to 16 years with an average age range of 15 years.

II. Method of Sampling- Purposive sampling method was adhered during selection of research sample.

III. Measures-

(a) Academic Stress Scale of Abha Rani Bist.

(b) Self Prepared Personal Data Sheet.

Procedure of data collection- For data collection work, a well plan were made by researcher. The researcher had contacted to the head of the selected

schools with a set of scales and conveyed them purpose of meeting. The data collection work was finished in a small group situation.

Analysis of data- The collected data was analyzed with t-test method and prepared result in the current context.

Results-

Table No 01
Comparison of Academic Stress
between Boys and Girls respondents

Group	N	Mean	SD	t-value	p-value	df
Boys Respondents	135	132.17	8.51	3.01	<.01	148
Girls Respondents	115	136.19	10.71			

Table No 02
Comparison of Academic Stress between Science
and Arts Stream Students

Group	N	Mean	SD	t-value	p-value	df
Students of Science Stream	120	135.71	15.34	3.76	<.01	148
Students of Arts Students	130	131.97	13.11			

Table No 03
Comparison of Academic Stress between
Students of English medium and Hindi medium schools.

Group	N	Mean	SD	t-value	p-value	df
Students of English medium school	120	115.0	14.76	4.11	<.01	148
Students of Hindi medium	130	107.0	11.35			

Table No 04
Comparison of Academic Stress
between rural and urban students:

Group	N	Mean	SD	t-value	p-value	df
Urban Respondents	125	103.11	16.73	3.63	<.01	148
Rural Respondents	125	97.43	12.34			

Discussion-

(i) Comparison of Academic Stress between Boys and Girls Students- In the view-point of comparison of academic stress between boys and girls students, it was hypothesized that, "there would be significant difference between boys and girls students interm of their academic stress level." The collected data were statistically analyzed and found that girls Srespondents were more academically stressed comparatively boys students. According to this result it can be say that girls respondents were more eager toward their education. Thus, this result confirmed our earlier made hypothesis no.-(i).

(ii) Comparison of Academic Stress between Science and Arts Students-

In the view-point of comparison of academic stress between science and arts students, it was hypothesized that, "there would be significant difference science and arts students interm of their academic stress measures." In this regard the findings indicate that science students were found more stressed toward their academic performance than their counterpart art students. In this context, the findings indicated that students belonging to science faculty students eager and take care for their academic performance while arts students comparatively do not take care toward their academic performance. The calculated t-value (3.76) was found significant at beyond chance. Thus, this result confirmed our hypothesis no.-(ii).

(iii) Comparison of Academic Stress between Respondents of English medium and Hindi medium schools-

In the view-point of comparison of academic stress between respondents of English and Hindi medium school, it was hypothesized that, "the academic stress would be significantly differed between students of English medium and Hindi medium schools. The findings revealed that respondents of English medium schools were more stressed toward their academic success while students of Hindi medium schools were found comparatively less academic success. The calculated t-value (4.11) was found significant at <.01 level of confidence. According to this result the medium of school education significantly impact the respondents' academic stress level. Thus, this result also conformed our earlier made hypothesis no.-(iii)

(iv) Comparison of Academic Stress between rural and urban students-

In the view-point of comparison of academic stress between rural and urban students it was hypothesized that "the in habitational factor would be significant affector of respondents academic stress." The findings indicate that in habitational factor significantly effect the respondents academic stress level. The urban students were found more academically stressed while rural students were found comparatively rural students. Thus, this result confirmed our hypothesis no.-(iv)

Conclusion- To conclude, it can be say that,

- I. Girls students were more academic stressed than their counterpart boys students.
- II. The students of science faculty were found more academically stressed than their counterpart students of Arts faculty.
- III. There were significant difference between students of English and Hindimedium schools students. In this regard students of English mediumstudents were found academically more stressed while students of Hindi medium were found comparatively less academically stressed and
- IV. Inhabitation related (rural-urban) factor were too found effector of academic stress students. In this regard urban students found more academic stressed.

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**Practice of Pranayama
is A Miracle For Human Life in Today's World**
• Lokendra Pal Singh Chauhan

Abstract- *In today's world, when people are enslaved of ease, they are unable to see the catastrophic effect of ease in their life, easy things in long run provides discomfort to the human being. Some realize and some don't realize. Those who realize, would pursue the course of an action to come out of the cocoon of ease and commence their schedule, where some work can be done by them for maintaining themselves fit. In our vicinity, people are succumbing to various kind of diseases, mainly having hypokinetic nature, be it diabetes, obesity, high blood pressure or lower blood pressure. All are interrelated to each other; where one begets another. Therefore, one should understand the significance of physical exercises in their life and must pursue such actions which can, at least, keep them physically and eventually, they can being fit, can achieve with their hard work, whatever they are desirous of. But, sometimes, owing to the busy schedule and with single minded thought of earning as much money as possible, one forgets the serious repercussions one would face in his life. In early thirties, forties and fifties one can earn money but at the cost of their health and from fifties only, start spending huge amount upon the well-being of their family. He is unable to look after himself and his precious family, can't take care even of children for whom he is amassing so much wealth. The first principle of Ayurved is- nirogikaya (health), but even this is not kept in mind. Mainly people out of their laziness unable to pursue healthful activities and succumbed to mobile phones, televisions, laptops and other accessories of Comforts and such bad practices are hindrances for healthful living. To survive successfully without falling prey to innumerable diseases, one must follow some practices like yoga, pranayam for physical workout. If much time is not available, vicinity is not conducive for your physical workout and owing to too much pollution outside, one can definitely go for Pranayam. Various Pranayam and their effect are discussed and if done with honesty and dedication one can achieve health full life and even can spiritually uplift himself the very core aim of the human existence.*

Keywords- *Pranayama, Human, Physical exercises*

Meaning of Pranayama- Pranayama means control and regulation of breath. 'Prana' is a Sanskrit word which means 'vital force'. It also implies 'life' or breath. 'Ayama, means the control of the Prana so Pranayama means the regulation of the vital force (Prana) by attentiveness and planned breathing.

Psyche is the indispensable power or force which is encouraging every element on the earth and is the basis of the force of thought. There is a bottomless attraction between Prana and mental force, between mental force and brain, between intelligence and soul, and between soul and God. The

Prana not only certifies the appropriate operation of the body (including the glandular system), but is also the supervisor and vitalizer of the psyche. It is a medication for several physical and psychic turbulences of which modern man is the victim.

In overall forms of life, from the uppermost to the lowermost, the prana is present as a active force. All the vigor is based on prana; it is the source of movement, gravity, magnetism, physical action, the nerve currents and the force of the thought. Without prana there can be absolutely no life, because it is the soul of all force and energy. It is found in the air, water and food. Prana is the vital energy inside individual living being, and thought is the uppermost and most superior action of Prana. As we breathe, the movement of the lungs inhaling air is the appearance of prana. Pranayama is not only simply the breathing but also the control of the muscular force activating the lungs.

The control of Prana through the attentiveness of thought and regular breathing is called 'Pranayama'. It is through Pranayama that each part of the body can be filled with Prana. As soon as one is capable of performing it, one is master of the body and can control illness and misery. Prana is collected where our mind is focused.

Thought is the out-and-out master controlling Prana-energy. Just as we are able to make ourselves ill and feeble by thinking erroneous and undesirable thoughts, in same fashion we may cure ourselves by discharging immoral thoughts and substituting them with positive ones. It is indispensable factor in our lives. It is a elementary obligation for the safeguard of our health. As a wind drives smoke and filths from the atmosphere, Pranayama drives away the filths of the body and mind.

Aim of Pranayama- The aim of Pranayama is to inspire, motivate, regulate and balance the vital force (Prana) dominant in the body, which purifies the body and wisdom is revealed. Pranayama is called the soul of yoga, the way the bathing is necessary for cleansing the body, congruently, Pranayama is indispensable for purification of the mind. Just as gold and other metals melted in the fire become pure so also the sense-organs of body that get rid of the impurities by pranayama, thereby to toughen the Nervous System, which also increases the attentiveness of the mind.

The important components of pranayama are-

- Puraka means to inhale
- Rechaka means to exhale
- Kumbhaka means to retain the breath.

Types of Pranayama

- Surya Bhedana Pranayama
- Ujjayi Pranayama
- Sheetkari Pranayama
- Sheetali Pranayama
- Bhastrika Pranayama

- Bharmari Pranayama
- Moorchha Pranayama
- Kapalabhaati Pranayama
- Sama Vrtti Pranayama
- Nadi Sodhana Pranayama
- Plavini Pranayama.

Surya Bhedana Pranayama- Surya is the sun; Bhedana is derived from the root, bhed, which means to pierce, to break or pass through. The surya bhedana exercise kindles that part of the brain which comprises the life force (vital force). By the practice of this Pranayama produces heat in the body. In it the breath, inhaled through the right nostril; prana passes through the pingala of surya nadi; kumbhaka is performed and the breath is exhaled through the left nostril, which is the path of the Ida nadi.

Ujjayi Pranayama- This means upward or superiority in rank; means blowing or expanding; it conveys the sense of pre-eminence and power; it produces heat in the body; Ujjayi means conquest, victory, triumph or success. Therefore, it is the process in which the lungs are completely expanded and the chest puffed out similarly like that of a proud conqueror.

Sheetakari Pranayama- The practice of Sheetakari possesses a cooling effect on the body; the tongue is not curled; the lips are kept slightly parted and only the tip of the tongue protrudes between the teeth; the tongue is kept flat as in its normal state.

Sheetali Pranayama- Sheetali means cool; means it cools the system i.e., body and mind. In this protrude the tongue out and curl it like a pipe; breath with a sound Si-si-si and fill the lung entirely; hold the breath for so much time as possible; then slowly exhale through both, the nostrils.

Bhastrika Pranayama- Bhastrika means a bellows used in a furnace; the air is forcibly drawn in and out as in black smith's bellow; in it the subject takes vigorous breath and exhale fast and forcefully; one inhalation and one exhalation completes one cycle of bhastrika; the sound made resembles air rushing through bellows.

Bharmari Pranayama : (humming bee breath)- Sit in a padmasana or sidhasana; close the eyes and relax the whole body for a short time; lips must remain gently closed with teeth slightly detached throughout the practice; The sound vibration is heard and felt more distinctly in the brain; Raise the arms and bend the elbows, bringing the hands to the ears; plug the ears with middle or index finger; breathe in through nose; exhale slowly and in a controlled manner while making a deep steady humming sound like that of the black bee; humming sound must be smooth, even and continuous for the duration of exhalation; the sound should be soft; breathe deeply at the

end of exhalation; This is one round, repeat the process.

Moorchha Pranayama : (Swooning or fainting breath)- Sit in a padmasana or sidhasana; keep the head and spine straight; relax the whole body; observe the breath until it becomes slow and deep; keep the arms straight by locking the elbow and pressing the knees with the hands; retain the breath inside for so long as is comfortable; exhale while relaxing the arms; close the eyes and slowly bring the head back to the upright position; relax the whole body; this constitutes one round, repeat the process; Moorcha means to faint; through this the experiences of conscious and unconsciousness are meant to arise; this process is to expand the consciousness and store prana.

Kapalabhati Pranayama- Kapalabhati (Kapala is skull ; bhati is light, luster) is a slighter form from Bhastrika Pranayama; in Kapalabhati, the inhalation is slow but the exhalation is vigorous, there is a split second of retention after each exhalation.

Sama Vrtti Pranayama- Sama means the same or identical, straight, entire, whole and complete, also similarly or in the same manner; vrtti means action, movement, function or operation, a course of conduct or method; in an attempt is made to achieve uniformity in the duration of all the three Processes of breathing, namely puraka or inhalation, Kumbhaka or retention and Rechaka or exhalation in any type of Pranayama.

Nadi Sodhana Pranayama- Nadi is a tubular organ of the body like an artery or a vein for the passage of prana or energy; nadi has three layers like an insulated electric wire; the inner most layer is called sirsa, the middle layer damani and the entire organ as well as the outer layer is called nadi; Sodhana means purifying or cleansing so the object of Nadi Sodhana Pranayama is the purification of the nerves. A little obstruction in a water pipe can cut off the supply completely, in the same fashion, a little obstruction in the nerves, can cause great discomfort and paralyse an organ.

Plavini Pranayama (Gulping breath)- In this the inner part of the abdomen being completely filled with air and one floats like a lotus leaf on water; Plavina means to 'float'; It is an unusual form of pranayama and is similar to vatsra dhauti, except the air is retained in the stomach and intestines and not expelled immediately.

Physiological Values of Pranayama- Pranayama soothes the nerves and tones the entire system; it increases digestive power, invigorates the nerves and cleans the sinuses; the blood receives a larger supply of oxygen, one feels refreshed; the nerves are calmed and purified; pranayama activates and invigorates the liver, spleen, pancreas and abdominal muscles; the sinuses are drained and the eyes feel cool; it cools the system and soothes the eyes and ears; it benefits persons suffering from low blood pressure and high blood pressure ;it keeps the body fit and healthy; it improves the

power of memory and eliminates mental disorder; it purifies tubular channels and removes sluggishness from the body; the constant practice of Pranayama strengthens the nervous system, the mind becomes calm and capable of concentration; the constant practice of Pranayama arouses spiritual power; it gives spiritual joy, spiritual light and mental peace; it clears the skull, the respiratory system and nasal cavities; it eliminates the cough accumulated in the wind pipe, and cures the asthma; it tones up the heart and activates the respiratory system, and the circulatory system; it purifies the blood and many more.

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