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### A Study on the Self Assessment of Post Menopausal problems among the Santals: A Case study in three Districts of West Bengal

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#### ABSTRACT

*Menopause, an important marker of Biological ageing of women, brings* about significant physiological and psychological changes which may affect their daily life and attitudes towards life. Usually, women are negligient about their health problems in peri menopausal period, though many of these problems may end up with chronic diseases in later life. The perception of all these problems depend not only on body physiology, but also on some social and cultural factors. Considering the importance of this phase of women's life, the present study has been undertaken to identify the perceptions and experiences in a special community who do not pay any attention to these problems. Hence, the study has been carried out in about 170 middle aged tribal (Santal) women of Birbhum, Bankura and Purulia district of West Bengal. during their menopausal and perimenopausal period. The tools for data collection was a standard pretested modified questionnaire . Mean menopausal age for these women in the three districts varied with a range from 42.5. years to 44.7 years., which are much lower than the scores of control subjects.\_They reported about their experiences under the four major categories, such as Physical or Somatic (including vasomotor changes), Psychological and Sexual problems. Compared to the non tribal urban counterpart of the district, these Santal women reported least about the psychological problems though the somatic problems were quite similar to the control women. They considered all the problems associated with this phase of life as natural part of ageing and did not seek for any kind of medical variations for menopausal transitions.

#### **1.00 Introduction**

Essentially Menopause marks the end of a woman's natural fertility. In fact, it is a step in ageing process and represents the end of menstruation, i.e after the last menstrual periods in the previous 12 months (Bavadam 1999, Jahanfar Sh et al 2006). Except for surgical cause, due to some serious diseases of uterus or ovary, it is a natural physiological event with permanent cessation of menstruation, and not due to any other pathological causes. (Lu et al 2007) Deficiency to depletion of ovarian function leads to a variety of somatic, psychological, sexual manifestations that can change the quality of life of the women (Peeyananjarassri et al 2006, Chedrauiet al 2008). Menopause has now demanded attention of Scientists, since, according to World Health Statistics 2016, female life expectancy has increased tremendously, and in India, it is now 69.9 years (Soules et al 2001)

Natural age of menopause may range from early 40s to mid of 50s Agarwal 2008, Jahanfar et al 2006, Christian et al 2012), which reflects at least one third of their life has to be spent after

ovarian failure. This condition affects Quality of life of menopausal women in the various domains, i.e. physical to psychological, sexual to socio-cultural on a daily basis (WHO 1996). In the long run, they become susceptible to cardio vascular diseases, osteoporosis, and cancer due to falling level of female -sex hormone Estrogen and Progesterone (Lindquist et al 1979, van der Schouw et al 1996). A research by the Study of Women's Health Aross The Nation (SWAN) in Boston, in the United States, suggested that the common symptoms reported depends upon biological, social, cultural and psychological process, which may vary within and between cultures and change over time (Richters 1997) Though studies have been conducted worldwide to explore problems of menopausal women, a handful of studies have also been carried out in this regard by Indian researchers in different states (Mishra and Kuh 2006, Bairy et al 2009, Dasgupta and Ray 2009, Mahajan et al 2012, Christian et al 2012, Borkar et al 2013, Karmakar et al 2017, Satpathy et al 2018, Agarwal et al 2018). But except for very few studies on this area on tribal women is not at all noteworthy (Roy 2008b, Dasgupta et al 2015). Their voices in this area is usually unheard For assessment of symptoms, during the menopausal transition; the Menopause Rating Scale (MRS) designed to assess menopause specific health related quantity of life (QoL) has proved to measure the severity of menopause-related complaints by rating a profile of symptoms., This MRS questionnaire originally developed by Heinemann et al 2003, is a self-administered instrument being widely used and validated in many clinical and epidemiological studies, and in research on the etiology of menopausal symptoms. It is composed of 11 items related to menopausal complaints serves the basis for assessing menopausal symptoms.

#### 2.00 Research questions

In India menopause in general is considered as a normal phenomenon of life and due importance is not usually given for the changing health issues and this is more alarming in case of people of low socio –economic back ground. Neither they understand the complication and issues associated with menopause, nor they seek any kind of medical help, rather wish to hide all these problems in the name of cultural reasons. Many of the researchers have modified the original Menopausal Rating Scale to explore the physical, psychological and miscellaneous other status of menopausal women. (Rahaman et al 2010) to make the people aware about their health problems and subsequent remedy. Considering the above conditions, the objectives of the presnt study were to determine the commonly reported menopausal symptoms among middle aged under privileged Santal women since if these problems are not addressed properly in due time, remedial measures can not be taken to improve their quality of life.

#### **3.00 Research Methods**

#### • Data Collection and Analysis:

- Area: This is a cross sectional study on Santal women from three Santal dominated districts of West Bengal. Two villages in each of the districts were randomly chosen.
- Subjects: Tribal Women of age group 35 to 60 years s were chosen from each of the villages at random. The target subjects were next selected through snow ball technique (Nagar et al 2005) in which first contacts were made with 2-3 women of the above mentioned age group and then they were asked to identify other women of the same age group All of them were interviewed to know about the regularity or cessation of their menstrual cycle. Those who have already attained menopause, i.e there is complete cessation of menstrual period for at least one year, were considered for further interview and those at the Perimenopause or had menstruation in the previous/last 2-12 months but had increasing irregularity of menses without skipping periods and Premenopause; minor changes in cycle length particularly decreasing length of the cycle. were excluded from the study. Preliminary socio

demeographic records indicated they all belonged to poor economic back ground, either act as irregular cultivators, or work in brick kiln industries along with their routine household jobs. They are all illiterate, but occasionally, can put their own signature in times of need.

• Assessment tool used for identifying Menopausal symptoms: By using modified MRS questionnaire, 170 no of Santal menopausal women of age group 40-60 years were interviewed, from all six villages. Control subjects, 120 in number, were educated and belonged to middle income group from urban area of the districts. In the questionnaire, 14 no of symptoms (divided into somatic and vasomotor, psychological and sexual domain) commonly associated with menopause were documented. In detail, following items were asked. Each of the fourteen symptoms contained a scoring scale from "0" (no complaints) to "1" (present complaint). Therefore, this study determined the prevalence of menopausal symptoms and not the severity of the symptoms.

**1. Somatic and vasomotor Problems (8 no):** Hot flushes, profuse sweating, Heart Discomfort (unusual palpitations, tightness of chest), Insomnia,, Head ache, Joint pain and Back pain, Urinary incontinence, poor vision.

**2. Psychological problems (4 no):** Anxiety and forgetfulness, Mental fatigue, Depressive mood, Irritability

3. Sexual Problems (2 no): Loss of libido, Sensation of dryness or burning in vagina.

Each interview was conducted face to face for about 15 minutes. Since most of the Santals were illiterate, verbal consents were taken from them and were assured that the confidentiality of the study would be maintained. Their consent were further authenticated by local Panchayet pradhan. Control subjects were treated identically, only difference was they gave their written consent for inclusion in the survey process.

The survey was conducted from November 2016 to January 2017. A checklist was used to identify the frequency and intensity of various physiological problems as perceived by the women during menopause. Their menopausal age was calculated using their own statement and further cross checked with the age of their off springs, marital status along with the local event calendar. All Data were analyzed through descriptive statistics.

#### 4.00 Results and Discussions

The present study has been undertaken with a total of 170 no of Santal women and 121 no of control Non Tribal women (General caste Bengali Hindu women). (Table 1) from Birbhum, Bankura and Purulia district of West Bengal. The result of the present study reveals comparatively lower menopausal age of Santal women compared to their control urban Non tribal women. (Table 2). The mean age of menopause for the Santals of three districts are quite comparable (44.7 years in Birbhum district, 43.6 years in Bankura District and 42,5 years in Purulia district.) Menopausal age of control non Santal urban women were found to be significantly higher. (53.8 years in Birbhum, 51.4 years in Bankura District and 52.7 years in Purulia district.) (Table.3). The assessment tool used in this study for post menopausal problems of the subjects was based primarily on MRS questionnaire., which is a self-administrated questionnaires, and can be used not only to assess the menopausal symptoms but also the severity of these symptoms by rating scales. But in this study, modification has been done on the scaling of the original MRS, considering the practical situation when the investigator faced the problems with the Santal subjects as they subjects showed difficulties in rating the scales. Thus to minimize the perceptional or reporting error, face to face interview were used instead of filling up form by the respondents and the scale was measured in the binary form, 0 or 1., i.e either Yes or No.

Perception studies on menopausal women have been carried out in different countries, such as Sydney (Lu et al 2007) Malaysia (Rahaman et al 2010, Jahanfer et al 2006), Thailand (Peeyananjarassri et al 2006), Latin America (Chedraui et al 2008), and also in various states of India, such as Kerala (Borkar et al 2013), South India (Bairy et al 2009), rural area of Gujrat (Christian et al 2012), Orissa (Satpathy et al 2018) North India (Mahajan et al 2012, Agarwal et al 2018). A few studies have also been done in Eastern India (Dasgupta and Ray 2009), specially in West Bengal in different communities (Roy 2008a, Roy 2008b, Dasgupta et al 2015, Karmakar et al 2017) However, except for a few instances in Santals of a district (Roy 2008b) or on Lodha community, (Dasgupta et 2015) seldom this kind of research has been carried out on tribal women of West Bengal

Here, Table 4 shows the frequency of menopausal symptoms as assessed by the modified MRS used in this study, according to most frequent complaints. This table depicts the symptoms reported by Santal women during menopausal phase of life. The most prevalent complaints for them were mostly Somatic, i.e. Head ache (42.3%) Joint and Muscle pain (51.8%) Poor vision (42.9%) and Heart discomfort and palpitations. (39.9%). These are again followed by vasomotor symptoms, i.e hot flush (30.4%) profuse sweating (26.5%) and urinary incontinence (29.7%). They were not so open about their complaints about sexual dysfunction (7.14%), and loss of libido (9.33%). Regarding Psychological problems, although they could perceive about their rising rate of irritation (22.3%), anxiety and forgetfulness (31.4%), but never ever bothered about mental depression (5.26%), nor they complained about insomnia (7.5%). Earlier, Karmakar et al (2017), have documented major responses in somatic and psychological parameters for post menopausal women of Dearah village of West Bengal. Another study by Dasgupta et al 2015, on Lodha tribal community and Scheduled caste Community of Paschim Medinipur showed their responses more on hot flushes, urinary incontinences, profuse sweating, vaginal dryness etc but not on their psychological well being. Contrary to the Santals, the control group were bothered more about vasomotor symptoms (57.40%) and Head ache (61.38%), followed by joint and muscle-pain (45.45%), sexual dysfunction (47.56%)., insomnia (37.0%), Unlike the Santal women, they confessed more about major psychological problems, such as irritability (65.38%), mental fatigue (56.18%), Depression (47.59%), anxiety and forgetfulness (34.87%), though most of them reported about sedentary life style (Table.5)

Some of the Santal women reported that the menopausal symptoms specially the somatic problems experienced by them were severe enough to affect their normal daily activities, associated with their occupation in manual work, as most of them were engaged in brick kiln industries and crop cultivation. Unfortunately majority of these women were found not to be aware of the changes brought about by menopause.

The Table 6 shows that the mean score for Somatic symptoms in Santal menopausal women is 35.09% and mean score for Psychological symptoms represent only 12.64% while in case of control women, Somatic symptoms are not much different from the Santals, as it is 34.69%, but they were found to be much more victims of the Psychological symptoms (44.087%). Similar Psychological problems during menopause are well documented in literature in different non tribal communities. (Rahman et al 2010, Mishra and Kuh 2006, Dasupta et al 2015 etc). Change of both vasomotor changes and psychological changes have also been reported earlier by Hardy and Kuh 2002). This indicates that the Santal women are more bothered about maintenance of their basic need of livelihood to lead more active life even at the crucial state of physical transition, rather than being anxious of indulging themselves to many other trivial matters and do not nurture the idea of luxury for putting more stress on fluctuation of mood.

#### 5.00 Conclusion

Menopause, a special midlife stage, is a unique reality of life. Menopausal symptoms, are sometimes well tolerated by some women, but these may be particularly troublesome in case of others. These symptoms affect overall quality of life, and they may be victims of Cardiovascular disease (Van der Schouw et al 1996), osteoporosis (Lindquist et al 1979), and others (Lu et al 2007,). There is always under-reporting of symptoms among Indian women due to socio cultural factors and this is prominent and alarming in case of poor Tribal women. (Roy 2008b, Dasgupta and Ray 2009, Dasgupta et al 2015, Karmakar et al 2017). In this study, it has been found that these women candidly expressed their perceptions and these led us to understand how far these women experience vasomotor, somatic, and psychological symptoms with sexual dysfunctions.. The prevalence of each of these symptoms was found to vary across ethnic and socioeconomic groups, and cultural differences between rural and urban. Some researchers have observed socioeconomic (e.g., working status and income); lifestyle (e.g., smoking and dietary practices); and biological variables (e.g., body weight and parity) as predictors of menopausal symptoms (Dasgupta and Ray 2009. Richters1997). The analysis of different symptoms by the Santal menopausal women of the present study shows that these women are not aware of the fact that menopause itself is the key factor for many of their psycho-social and physical problems, which challenges their physical efficiency. With the increasing life expectancy women spends almost a third of her life in menopause and therefore, health issues of postmenopausal Santal and other tribal women demands special attention. We can not deny they constitute a major work force in agriculture and other unorganized sectors in a country.

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### 7.00 Appendix

#### Table .1 . Number of Subjects under Study : (Post menopausal Santal Women and Control women)

District	Post Menopausal Santal.women.	Post Menopausal control urban women
Birbhum	62	50
Bankura	57	33
Purulia	51	38
Total no:	170	121

# Table 2. Comparative Study Of average Menopausal Age(M.A.) of Santal.Women of villages of three districts

Parameters studied	Birbhum	Bankura	Purulia
Average M.A,	44.7years±1.24	43.6years±1.67	42.5years±2.74

# Table .3 . Comparative Study Of average Menopausal age(M.A.) of Control women of the urban locality Of the districts

Parameter studied	Birbhum	Bankura	Purulia
Average M.A.	53.8 years ±3.6	51.4 years± 2.54	52.7years±2.32

# Table.4. Comparative Study Of Evaluation Of Physiological And Psychological Problems Faced BySantal. Women During Post Menopausal Life. (Response result expressed in percentage)

Sl No	Types of	Perception of	Birbhum-	Bankura	Purulia	Average
	perception	parameters	Subjects (n=62)	Subjects (n=57)	Subjects (n=51)	value %
1	Somatic and vasomotor	Hot Flush	32.8	28.5	29.7	30.4
2		Profuse Sweating	28.5	24.4	26.7	26.5
3		Insomnia	7.1	8.5	6.9	7.5
4		Urinary incontinence	25.8	32.6	31.3	29,7
5.		Head Ache	45.5	38.7	42.6	42.3
6		Joint & Muscle pain	43.2	51.9	62.2	51.8
7		Poor Vision	45.8	38.9	43.8	42.9
8		Heart discomfort & Palpitation	41.9	40.8	36.4	39.9
9	Sexual	Sexual problem (vaginal dryness)	9.5	3.9	7.9	7.14
10		Loss of Libido	7.5	9.4	11.5	9.33
11	Psychological	Fatigue	13.7	10.7	18.6	14.16
12		Irritability	19.7	24.8	22.7	22.3
13		Depressive mood	2.5	7.8	5.8	5.26
14		Anxiety & forgetfulness	29.9	27.4	37.8	31.4

ontrol	women During	Post Menopausal Life.	<u>( Respo</u> nse resu	<u>it expressed</u>	in percentage	)
Sl. No	Types of perception	Perception of parameters	Birbhun- Subjects (n=50)	Bankura Subjects. (n=33)	Purulia Subjects (n=38)	Average Value %
1	Somatic &	Hot Flush	65.9	57.8	45.9	57.4
2	vasomotor	Profuse Sweating	42.9	32.1	40.2	39.10
3	-	Insomnia	35.7	42.1	34.3	37.0
4		Urinary incontinence	34.1	31.8	27.5	3.14
5	-	Head ache	66.8	58.8	56.5	61.38
6	-	Joint & Muscle pain	40.2	43.7	53.9	45.45
7	-	Poor Vision	32.7	38.9	31.8	34.10
8	-	Heart Discomfort and palpitations	38.7	36.2	28.7	34.87
9	Sexual	Sexual problem (Vaginal dryness)	52.9	37.6	49.2	47.56
10	-	Loss of libido	8.5	4.9	7.6	7.23
11	Psychological	Fatigue	66.8	53.2	44.8	56.18
12		Irritability	70.4	64.2	59.8	65.38
13	1	Depressive mood	57.8	36.5	43.8	47.59
14		Anxiety & Forgetfulness	38.7	36.2	28.7	34.87

Table.5. Comparative Study Of Evaluation Of Physiological And Psychological Problems Faced By	
Control Women During Post Menopausal Life.( Response result expressed in percentage)	

### Table 6: Summarized report of major Post menopausal problems

Cluster of Menopausal	Total scores for	Total scores for	
Symptoms	Post menopausal	Post Menopausal control urban	
	Santal Women.	women.	
	( N-170)	(N=121)	
Somatic	280.72	277.50	
	Marrie and a 2E 00	Maan aaan 24.60	
	Mean score : 35.09	Mean score : 34.69	
Psychological	50.56	176.34	
	Mean score: 12.64	Mean score: 44.08	

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**9.00 Ethical approval:** Ethical clearance was obtained from the local Panchayet committee and Institutional Ethics Committee.

#### **10.00** Author's Biography

Prof (Dr) Krishna Roy from West Bengal Senior Education Service (WBSES) possesses the rare opportunity to be the only Professor in Physiology in the Govt colleges of West Bengal. Right now, she is Principal of Bethune College Kolkata, She was the founder Principal of the first Government College for Girls established in Kolkata after Independence, Sister Nibedita Government General Degree College for Girls at Alipore.

Basically, as a teacher of Physiology, she possess consistently brilliant academic career and served various Institutions and Universities of the state at both Under Graduate and Post Graduate level. Besides her job in regular educational administration for the last eight years, she is still actively engaged in teaching, research. Her research works on Bacteriology and Tribal Health parameters have been published in a good no of research journals of National and International Standard. Along with research work, she is a distinguished writer in Bengali literature. is also actively engaged in the expansion of the subject Basic Human Physiology and Human Nutrition by regularly delivering popular lecture in different Educational Institutions.