



A Cross-Sectional Study of the Morbidity Profile of Matriarch and Non-Matriarch Women in Metropolitan City

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ABSTRACT

Background: Matriarch women are the ones who head the family. Most common reasons for being matriarch are widowhood, divorce, separation. In Indian society, due to socio-cultural factors, females face discrimination in health. Moreover, being matriarch, the women may be more vulnerable. Thus a study was planned to compare the morbidity profile among matriarch and non-matriarch women.

Materials and method: After an ethical committee approval, cross-sectional analytical study was undertaken in BDD (Bombay Development Department) chawls in the metropolitan city area from June 2015 to June 2016. Total 106 matriarch and 106 non-matriarch women were included after matching for religion and educational status. They were interviewed by using semi-structured, pre-tested questionnaire and Perceived Stress Scale (PSS). Data was analysed using SPSS version 16 software.

Results: Proportions of acute and chronic morbidity in matriarch and non-matriarch were (50% v/s 51.89%) and (50.95% v/s 23.59%) respectively. No significant differences in symptoms like musculoskeletal complaints, headache, weakness, giddiness, addiction, diabetes and BMI were found. The proportion of hypertension, disturbed sleep, decreased appetite and stress were significantly higher in matriarch women as compared to non-matriarch.

Conclusions: Hypertension and stress are significantly higher among matriarch women. There is minimal difference in the occurrence of acute morbidity.

Keywords: Matriarch women, morbidity, stress, non-matriarch women

INTRODUCTION

Matriarchal family is headed by a female family member. Matriarchy is seen in some parts of India like Assam, Kerala, Madhya Pradesh, Goa, Bihar, Tamil Nadu, Meghalaya.¹ Reasons for emergence of matriarchal family are widowhood, divorce, separation and desertion, unemployed males, disability or severe illness of males, etc.²

In India, the proportion of matriarch household is increasing. It was 9.2% and 14.6% in NFHS-I and NFHS-IV respectively.^{3,4} It was 10.9% in India.⁵ In

Maharashtra and Mumbai, it was 10-13% and 15.47% respectively (Census 2011).⁶ In India as well as in Maharashtra, most common reason is widowhood (Census 2011).^{5,6}

The matriarch households are deprived on certain socio-economic indicators such as education of head of the household, type of house, Standard of Living Index (SLI) and Wealth Index.^{3,5} In Indian society, due to socio-cultural factors, females face discrimination in health, nutrition, education, occupation and income and lack of autonomy in de-

cision making. Sometimes women experience physical, sexual and emotional violence. Hence on becoming family head, they have to face many difficulties. The survival of matriarch household is not easy if the female head is the sole income producer. If there is an earning male member in matriarchal family, the decision making power usually rests with him and the female is only the nominal head of family. Also, matriarchs commonly being widows, get less support from relatives and society. In some places they are prohibited from attending social functions. Thus, matriarchs are more likely to face some stressful circumstances like death of husband or separation, lack of social integration, work related problems, financial issues, property issues, physical incapacity, children leaving home and feeling of the generation gap, that cause physical and mental ill-health.

The psychological stress makes them more susceptible to chronic illnesses resulting in decreased quality of life and financial burden. Most of the matriarchs are elderly women who are premenopausal or menopausal. This results in additional health morbidities like osteoporosis, cardiovascular diseases, menopausal symptoms etc.⁷ Acute morbidities like fever, respiratory illness, gastrointestinal illness, giddiness, headache; musculoskeletal symptoms; reproductive tract illness; menstrual disorders; etc. and chronic conditions like hypertension, diabetes mellitus, cardiovascular diseases, thyroid disorders, rheumatoid complaints are common in women.⁷⁻¹⁰

Some research studies done on morbidity profile of women.⁷⁻¹⁰ However, there is limited research on morbidity studies of matriarch women and given the increasing proportion of matriarch households in Indian society, we focussed to assess the socio-demographic status and compare the morbidity profile of matriarch and non-matriarch women.

MATERIALS AND METHOD

After the Institutional Ethics Committee approval, the present cross-sectional analytical study was conducted in 42 BDD chawls which is the field practice area of teaching medical institution in a metropolitan Mumbai city. The study was undertaken with the objectives of studying and comparing the socio-demographic status and morbidity profile of matriarch and non-matriarch women. Each BDD chawl has 80 households. Matriarch women were identified by going door to door in each chawl. Matriarch women were defined as women who were head of family and had ration card or rent slip in their name. Thus, total 118 matriarchs were found in the study area by Census method. Out of 118 matriarch women, written in-

formed consent was given by 106 women to participate in the study. Non-matriarch group included eldest woman who was not family head, from the house adjacent to the house of matriarch. After matching for religion and educational status, 106 non-matriarch women were selected for the study. Study subjects were interviewed by using semi-structured, pretested questionnaire. Acute morbidity was defined as the health complaints present within 7 days from the time of interview. Chronic morbidity was defined as the health complaint with the duration of more than 3 months. Detailed information about socio-demographic characteristics, acute morbidities, chronic morbidities, menstrual history and personal history was obtained.

Stress was assessed using Hindi and Marathi versions of 14-point Perceived Stress scale (PSS). PSS measures the degree to which individuals perceived their daily life as being stressful during the last month. The scale comprises of 14 questions. Of these 14 questions, seven are positive (4, 5, 6, 7, 9, 10, 13) and seven are negative questions. Answer to each question is the rating on a 5-point Likert scale (0 = never, 1 = almost never, 2 = sometimes, 3 = fairly often and 4 = very often). The PSS scores are obtained by reversing the responses (E.g. 0 = 4, 1 = 3, 2 = 2, 3 = 1, 4 = 0) to the seven positive responses and summing all the responses. Total scores range from 0 to 56. Higher scores on the PSS represent higher levels of perceived stress.¹¹

After the interview, anthropometric assessment for height and weight was done, followed by examination of study subjects. Nutritional status was assessed by Body Mass Index (BMI). WHO Standards were used to classify BMI.¹² For blood pressure, Indian Hypertension guidelines were considered.¹³

Statistical analysis: Data was entered using Microsoft-Excel 2010 Software. Data was analyzed using SPSS version 16 statistical software. Descriptive statistics was presented in the form of frequency and percentages. Comparison of categorical variables was done using chi square test. PSS scores were compared using Mann Whitney U test.

RESULTS

In the present community based study, total 118 matriarchs were found. Thus, the proportion of female headed households was 3% - 5% in the study area. Among them, 106 matriarch women and 106 non-matriarch women were enrolled. Table 1 describes the socio-demographic profile of matriarch and non-matriarch women in the study area. The range of age of matriarch women in the present study was 26 years and 80 years. The mean age of matriarch study subjects was 54.39 ± 10.86

years. Among non-matriarch study subjects, minimum age of study subjects was 28 years and maximum age was 75 years. Mean age of non-matriarch study subjects was 50.30 ± 10.27 years. Majority of study subjects .i.e. 60.84% were Hindu by religion, 35.37% women were Buddhists, 1.88% were Muslims and 2.83% were Christians. Among matriarchs, 11174.58% were widows and 9.44% were separated from their spouse. Majority of non-matriarchs (99.06%) were married. Among matriarch women, 13.2% women and among non-matriarch women, 7.54% women were illiterate. Among matriarchs, 35.84% were employed in some occupation and among non-matriarchs, only 14% were employed. Among matriarch families, families in lower socioeconomic class (50.94%) were more as compared to non-matriarch families in lower socio-economic class (21.69%).

There was no significant difference in the prevalence of acute morbidity among matriarch women (50%) and non-matriarch women (51.9%)(P value > 0.05) (Table 2). Common acute morbidities present were musculoskeletal complaints, headache, weakness, respiratory tract complaints, reproductive tract complaints, urinary tract complaints, gastrointestinal complaints, fever, skin ailments and eye ailments. Common respiratory tract complaints were rhinitis, cough, fever and earache. Gastrointestinal complaints commonly present were acidity, flatulence, abdominal pain and loose motions. Most common reproductive tract complaints were vaginal discharge, low abdominal pain and itching. Burning micturition and frequent micturition were common urinary tract complaints.

Table 1: Socio-demographic profile of study subjects (N=212)

Socio-demographic profile	Matriarch Women (n=106) (%)	Non-matriarch women (n=106) (%)
Age-groups		
25-40	10 (9.4)	19 (17.9)
41-55	52 (49.1)	60 (56.6)
56-70	40 (37.7)	24 (22.6)
71-85	4 (3.8)	3 (2.8)
Religion		
Hindu	67 (63.2)	62 (58.5)
Buddhist	37 (34.9)	38 (35.8)
Muslim	0 (0)	2 (1.9)
Christian	2 (1.9)	4 (3.8)
Marital status		
Married	11 (10.4)	105 (99.1)
Unmarried	6 (5.7)	1 (0.9)
Widow	79 (74.6)	0 (0)
Separated	10 (9.4)	0 (0)
Education		
Illiterate	14 (13.2)	8 (7.5)
Primary	23 (21.7)	27 (25.5)
Secondary	40 (37.7)	41 (38.7)
Higher Secondary	21 (19.8)	20 (18.9)
Graduate	8 (7.5)	10 (9.4)
Employment Status		
Unemployed	68 (64.2)	91 (85.8)
Employed	38 (35.8)	15 (14.2)
Socio-economic status* (
Upper	0 (0)	3 (2.8)
Upper middle	12 (11.3)	42 (39.6)
lower middle	40 (37.7)	38 (35.8)
Upper lower	53 (50)	22 (20.8)
Lower	1 (0.9)	1 (0.9)

*Modified Kuppuswamy Scale 2015

Table 2: Comparison of acute morbidity among matriarch and non-matriarch women (N=212)

Complaints (Multiple responses considered)	Matriarch women (n=106) (%)	Non-matriarch women (n=106) (%)	Total (%)
Presence of acute morbidity	53 (50)	55 (51.9)	108 (50.9)
Musculoskeletal complaints	36 (34)	24 (22.6)	60 (28.30)
Headache	8 (7.5)	8 (7.5)	16 (7.54)
Giddiness, weakness	5 (4.7)	11 (10.4)	16(7.54)
Respiratory tract complaints	7 (6.6)	6 (5.7)	13(6.13)
Fever	2 (1.9)	2 (1.9)	4(1.88)
Gastrointestinal complaints	10 (9.4)	7 (6.6)	17(8.02)
Reproductive tract complaints	1 (0.9)	4 (3.8)	5(2.36)
Urinary tract complaints	3 (2.8)	2 (1.9)	5(2.36)
Skin ailments	2 (1.9)	4 (3.8)	6(2.83)
Eye disorders	5 (4.7)	3 (2.8)	8(3.77)
Others	2 (1.9)	2 (1.9)	4(1.88)

Table 3: Comparison of chronic morbidity with head of family status (N=212)

Chronic morbidity (Multiple responses considered)	Matriarch women (n=106) (%)	Non-matriarch women (n=106) (%)	Total	P value
Presence of chronic morbidity	54 (50.9)	25 (23.6)	79 (37.3)	<0.001
Hypertension	37 (34.90)	16 (15.09)	53 (25.0)	0.001
Diabetes Mellitus	13 (12.26)	7 (6.60)	20 (9.4)	0.159

Table 4: Comparison of other findings with the head of family status

Other findings	Matriarch women (n=106) (%)	Non-matriarch women (n=106) (%)	Total (n=212) (%)	P value
Disturbed sleep	41(38.7)	16(15.1)	57(26.9)	<0.001
Decreased appetite	21(19.8)	6(5.7)	27(12.7)	0.003
Mishri use	33(31.13)	31(29.24)	64(30.19)	0.765
BMI-obese and pre-obese	54(50.9)	49(46.22)	103(48.58)	0.583
Pallor	16(15.09)	27(25.47)	43(20.28)	0.043

Prevalence of musculoskeletal complaints was more in matriarch women (67.92%) as compared to non-matriarch (45.28%). Most common musculoskeletal complaint in this population is low backache followed by knee joint pain. However, there was no significant difference in the presence of musculoskeletal complaints and head of family status.

Complaint of weakness was more in non-matriarch women (10.37%) as compared to matriarch women (4.71%) but the difference was not significant. Giddiness was also present in many study subjects along with weakness.

Apart from these, oedema was present in one matriarch woman and one non-matriarch woman. Insomnia was present in one matriarch woman. Oral ulcer was seen in one non-matriarch woman.

As evident from Table 3, the prevalence of chronic morbidity in matriarch women was 50.94% whereas in non-matriarch women it was 23.6% and the difference was statistically significant.

The prevalence of hypertension in matriarch women (34.90%) was significantly high as compared to that of non-matriarch women (15.09%). Prevalence of diabetes was more in matriarch women, however, the difference was not statistically significant (p value >0.05).

Thyroid disorders were present in 2 matriarch women and 4 non-matriarch women. One matriarch woman was found with chronic heart disease and another matriarch woman had rheumatoid arthritis. Asthma was present in 2 non-matriarch women. Apart from these, other chronic morbidities were stroke, hepatitis B, varicose vein, breast cancer among matriarch women and a case of polio among non-matriarch women.

In the study area, range of PSS score was from 16 to 35. The mean PSS score was 24.33 ± 4.14 . Mean PSS score in matriarch and non-matriarch women was 25.45 ± 3.98 and 23.22 ± 4.00 respectively. The difference was statistically significant ($p < 0.001$).

Among matriarch women, 88 (83.01%) were post-menopausal, whereas, among non-matriarch women, 70 (66.03%) were post-menopausal. Dysmenorrhea was experienced in 3 matriarch women and 5 non-matriarch women.

As is evident in Table 4, among matriarch women, 41 (38.6%) had disturbed sleep, which was significantly higher than non-matriarch women (15.09%). Decreased appetite was significantly higher in matriarch women (19.8%) than non-matriarch women (5.66%). 64 study subjects (30.2%) mostly matriarch women used mishri. Pre-obese and obese BMI was present among 50.9% matriarch women and 46.22% non-matriarch women. However, the difference was not significant. Among matriarch women, 2 women (1.88%) and among non-matriarch women, 4 women (3.77%) were underweight. On examination, presence of pallor was significantly higher in non-matriarchs (25.47%) as compared to matriarchs (15.09%).

Pitting oedema was seen in 5 matriarch women (4.72%) and 4 non-matriarch women (3.77%). Raised blood pressure at the time of examination was found in 5 matriarch women (4.72%) and 5 non-matriarch women (4.72%). Apart from these, one non-matriarch woman (0.5%) had raised pulse pressure.

DISCUSSION

In the present study, it was found that the percentage of female headed households was 3-5% in the study area of BDD chawls, which is lower than the Census 2011 finding.^{5,6}

In the study area, majority of study subjects 112 (52.8%) belonged to the age group of 41-55 years, followed by 64 (30.2%) women in the age group of 56-70 years. Thus, majority of women in our study were in the peri-menopausal or post-menopausal age group. Majority of matriarch women (86.72%) are in the age group of 41-70 years. Among non-matriarch women, majority (56.60%) were in the age group 41-55 years. In Maharashtra, female heads of households in the age group 40-69 years were 63.89% (2011 census).⁶ In Mumbai, it was seen that majority of female heads were in the age group 50-70 years (2011 census).⁶

Majority of women in our study were Hindus. i.e. 129 (60.85%) women, Buddhist women were 75 (35.38%), Muslim women were 2 (0.94%) and Christians were 6 (2.83%). As matching was done, religion distribution was similar among matriarch

and non-matriarch women in this study. At the national level it was found that the percentage distribution of female-headed households by religious communities was Christians (15.2 %) followed by Buddhists (12.6 %)(Census2001).¹⁴In our study, majority of matriarchs were Hindus (63.2%) followed by Buddhists (34.9%).

Majority of matriarch women (74.53%) in our study women were widows. Majority of non-matriarch women (99.05%) were married. In Maharashtra, amongst the female heads; 64.62% were widows(2011 census).⁶In Mumbai, female heads were commonly widows - 62.8% (2011 census).⁶The present study findings are similar to the census 2011 findings where majority of female heads were widows. This shows that the common reason for matriarchy is the death of husband.

Due to matching, the educational status of matriarch and non-matriarch women was almost similar. Among matriarch women, 21.7% women were educated up to primary school, 37.73% women were educated up to secondary school, 19.82% women were educated up to higher secondary school, 7.54% were graduates and 13.20% were illiterate. Study done by Kumar N et al showed that in female headed households in India, 67.1% were illiterate, 14.1% were educated till primary, 15.8% were educated till secondary school, and 2.9% were higher secondary educated.³ A community survey done in slum areas of Mumbai by Thakur et al showed that the majority of the female-heads were illiterate.¹⁵ This shows that the educational status of matriarch women in this study is better than the earlier studies.

In our study, 35.8% matriarch and 14.1% non-matriarch women were employed in some occupation. A community survey done in slum areas of Mumbai by Thakur et al showed that majority of female heads worked outside the home in the unorganised sector.¹⁵

More matriarch households (50.94%) were in lower socio-economic class as compared to 21.69% non-matriarch households. This is similar to findings of Kumar and Gupta.³

In the present study, 108 women (50.9 %) had presence of some acute morbidity and 104 (49.1 %) women did not report any acute morbidity. Women reported multiple symptoms. The prevalence of acute morbidity is similar in matriarch (50%) and non-matriarch (51.88%) women and the association between head of family status and presence of acute morbidity is not significant. Agrawal G et al observed that, overall morbidity prevalence rates among older widows in India 33.7%.⁹

The commonest complaint reported by 28.30% of women in the study area was musculoskeletal complaint. Matriarch women had slightly higher prevalence of musculoskeletal complaints as compared to non-matriarchs however the association between musculoskeletal complaints and head of family status was not significant. The possible reasons for greater proportion of musculoskeletal complaints in matriarch women may be more matriarch women being employed/working, menopausal state being more common in matriarch women, pre-obese/obese BMI being more in matriarchs in the present study. In a study by Sagar A. Borkar et al. in Kerala, musculoskeletal problems were present in 53.3% women.⁷ Study in Amritsar by Gill K et al, showed that prevalence of backache in women was 14.9%.¹⁰ In a cross sectional study conducted in an urban slum of Mumbai by Pandit D et al, low backache was present in 23.6% women.¹⁶ This finding is comparable to the present study finding.

Headache was present in 7.54% study subjects, the prevalence being similar in matriarch and non-matriarch women. In a study by Sagar A. Borkar et al., headache was present in 72.9% women.⁷ In a study conducted in an urban slum of Mumbai by Pandit D et al, headache was present in 26.4% women.¹⁶ As compared to these studies, the prevalence of headache is less in the present study.

The complaint of weakness was reported by 7.54% women and was associated with giddiness. It was more common in non-matriarch women (10.37%) than in matriarch women (4.71%), but there is no statistically significant association. This might be due to the fact that in the present study, more non-matriarch women were menstruating, had pallor and were underweight compared to matriarch women in the present study. In a community survey done in women in 430 households by Madhiwalla et al, weakness was present in 10.9 % women.¹⁷ This finding is similar to the present study finding.

The overall prevalence of respiratory tract complaints in 212 study subjects was 6.13% and was almost similar in matriarch (6.60%) and non-matriarch women (5.66%). Poor socioeconomic status leading to poor nutrition, poor standard of living, overcrowding, are the factors responsible for respiratory complaints. Single room house with no separation of cooking area and living area resulting in exposure to cooking fumes might also have contributed to respiratory complaints. Madhiwalla et al found that in a community survey, respiratory problems were present in 19.4% women.¹⁷ In a study by Pandit D et al, cough was present in 17.8% women.¹⁶ Present study findings differ from these study findings.

The prevalence of gastrointestinal complaints was 8.01% in the study subjects. Prevalence was 9.43% among matriarch women and 6.60% among non-matriarch women. Factors contributing to more prevalence of gastrointestinal complaints in matriarch women could be poor socioeconomic status in matriarch women which result in lack of hygiene and sanitation, poor infrastructure and living conditions coupled with poor educational status. Higher stress in matriarch women as seen by Perceived Stress Scale may cause heart burn and acidity. Hypertension being more prevalent in matriarch women, some antihypertensive medications also results in heart burn symptom. Study in Amritsar by Gill K et al, showed that abdominal pain was present in 9.4% women.¹⁰ This finding is comparable to the present study finding.

Reproductive tract and urinary complaints were present in 4.71% women. Among matriarch and non-matriarch women, these complaints were present in 3.77% and 5.66% women respectively. More proportion of married women in non-matriarch women may have resulted in this finding. Madhwalla et al found that, reproductive problems were present in 28.2% women in a community survey.¹⁷ In a study conducted by Pandit D et al, 13.8% women had vaginal discharge.¹⁶ Study in Amritsar by Gill K et al, discharge P/V was present in 16.6% women and urinary problems were in 7.3% women.¹⁰ The findings in present study are less than the previous studies. This might be due to shyness of study subjects in reporting reproductive tract complaints.

Presence of chronic disease was more in matriarch women as compared to non-matriarch women and the association between presence of chronic diseases and head of family status is found to be significant (Table 4).

The overall prevalence of hypertension in 212 study subjects was 25%. Hypertension was more prevalent in matriarch women (34.90%) than in non-matriarch women (15.09%) and also the association is statistically significant. (Table 3) This may be due to various risk factors like- more postmenopausal study subjects in matriarch women, high stress in matriarch women as seen by perceived stress scale score, higher proportion of pre-obese / obese BMI in matriarch women, and higher prevalence of mishri use in matriarchs. In a community-based study conducted in Lady Hardinge Medical College, New Delhi, it was observed that higher proportion of postmenopausal women fall in the category of pre-hypertension or hypertension. The prevalence of hypertension was as high as 39.6%.¹⁸ Banker et al in their study found that prevalence of hypertension was 59.6% among

females.¹⁹ The present study finding is less than the previous study findings.

Diabetes was present in 9.43% women out of total 212 study subjects. Diabetes was present in 12.26% matriarchs and 6.60% non-matriarchs. In the present study, the prevalence of diabetes was more in matriarch women than in non-matriarch women due to the higher presence of risk factors like postmenopausal status, pre-obese/obese BMI and hypertension in matriarch women. However, association between diabetes and head of family status is not significant. Pandit D et al in their study in urban slum, Mumbai found 4.6 % women had blood sugar values above 200 mg/dl.¹⁶ The finding in present study is less than the previous study finding.

In the study area, women had mean Perceived stress scale (PSS) score as 24.33 ± 4.14 . Among matriarch women and non-mariarch women mean PSS scores were 25.45 ± 3.98 and 23.22 ± 4.00 respectively. Stress among matriarch women was comparatively more than non-matriarch women and the association is statistically significant. Mani G et al found that the mean stress score for 10 point perceived stress scale of the elderly participants in Tamil Nadu was 19.66 with a standard deviation of 7.37. Higher stress scores were found in those with lower educational levels, unmarried/widowed or separated status, and financial dependency, longer duration of stay at home, living alone in the home, associated chronic disease and spending leisure time alone.²⁰ A study by Yu R et al in Chinese women showed PSS scores of 11.54 ± 7.15 . In single, widow, divorced or separated women score was 12.95 ± 7.11 . In married women it was 11.23 ± 7.14 . When scores were classified by level of household income, PSS scores declined as household income increased. Compared with housewives, women with paid employment had higher PSS scores. Perhaps being employed in midlife was a source of stress resulting from perceived job uncertainty, interpersonal conflicts and financial difficulties. Women who were never married, widowed, divorced, or separated had generally higher PSS scores.²¹ In a study done in Greece by Andreou et al, the mean perceived stress scores reported on a 14-point stress scale in men was 23.48 and in women was 25.64. In married individuals, score was 23.16; in single individuals it was 25.72 and in Divorced/widow it was 26.31.²² The present study findings are similar to this study.

More matriarchs (19.8%) reported decreased appetite than non-matriarchs (5.66%) and the difference is significant. Decreased appetite is a natural part of aging. Depression or loneliness may also result in decreased appetite.

Disturbed sleep was experienced more in matri-

archs (38.7%) than non-matriarchs (15.09%) and the difference is significant. Decreased sleep is a natural part of aging. However, factors like pain, stress, worry, gastrointestinal disease especially heart-burn/ acidity, mishri use, medications like anti-hypertensive also result in decreased sleep. This may be responsible for higher prevalence of disturbed or decreased sleep in matriarch women.

Slightly higher proportion of matriarch women (31.13%) were using mishri as compared to non-matriarch women (29.2%), however, the difference is not significant. In a study by Pandit et al, 32.18% of women among the study population reported to be using tobacco daily in the form of mishri, paan, gutkha or sniffing.¹⁶ The present study finding is similar to this study finding.

Overall, 48.58% women in the study area were pre-obese and obese (BMI > 25) and 2.83% were underweight. Among matriarch women prevalence of pre-obese and obese women was more than non-matriarchs, however, the association between BMI and head of family status is not significant. In a study by Pandit D et al, 32.18% women had body mass index above 25, 5.7% of women were underweight.¹⁶ Thus in the present study, the percentage of obese and pre-obese women is more.

Pallor was seen 20.28% study participants, prevalence being significantly higher in non-matriarch women than matriarch women. In non-matriarch women, there were more menstruating women as compared to matriarchs. According to the sociocultural practices, in non-matriarch families more importance is given to the nutrition of male members. The study conducted in urban slum of Mumbai by Pandit D et al found the prevalence of anaemia as 77.7% among women.¹⁶

In this study, only 106 matriarch women were included, hence there are limitations to generalize the study findings. Also limited literature was available on matriarch women to discuss the study findings. The data was collected by interviewing the study subjects relying on the information provided by them. Even though utmost efforts were taken to build rapport with the study subjects, still there might have been deliberate under-reporting of certain symptoms or illnesses like reproductive tract illnesses, urinary complaints, psychiatry complaints, infections like TB, addiction etc.

Further similar studies can be conducted at large scale in other areas to assess the morbidity profile among matriarch women. This can form the basis for the policy makers and welfare organizations to draft and implement schemes related to matriarch women.

CONCLUSION

There is minimal difference in the occurrence of acute morbidities among matriarch and non-matriarch women. Matriarch women displayed greater vulnerability towards stress. The observed significant difference in morbidity profile in relation to hypertension, disturbed sleep and decreased appetite may be attributed to this stress level.

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