



HEALTH DISORDERS OF URBAN, RURAL AND TRIBAL WOMEN WORKING IN FARMING AND ALLIED FIELDS

Home Science

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ABSTRACT

The study was carried out from two agro-climatic zones of Maharashtra. Nanded district was selected from Central Maharashtra Plateau zone and Nagpur district was selected from Central Vidarbha zone. This research consist sample of six hundred farm women 200 each from urban, rural and tribal areas. In the present study, anthropometric measurements, health problems and occurrence of chronic diseases of the women working in farming and allied fields were studied. Average height, weight and average BMI of the urban women were more than that of rural and tribal women. Except acidity, the occurrence of digestive disorders among the respondents from all the three areas was almost same. Occurrence of respiratory disorders among the tribal women was slightly more than other two areas. Rural and tribal women were facing more to the general disorders like pain in different body parts, weakness and general fatigue than that of urban women. Occurrence of gynec disorders was more in urban women than that of rural and tribal. Occurrence of chronic diseases was more in urban women.

KEYWORDS

Allied fields, farming, health disorders, women.

INTRODUCTION

Health is a crucial area where no due attention has been paid for women. Nutritional surveys indicate large gaps in nutritional requirements and consumption among females as compared to males. When we talk about the farm women, as Kale et al. (1999) stated, that introduction of machinery for women to perform the farm operations is very less. Therefore women perform the farm activities manually by adopting traditional methods, which are full of drudgery. This will have adverse effect on health and also affects the quality of work and output. The aggregate workload placed on the women tends to be high thereby lowering efficiency and leading to irreparable damage to their body in long run. To ensure the better health and safety, it is important to have good relationship between their occupational workload, physical fitness and the food, which they regularly eat. It is necessary to take more care of women than men who are vulnerable to malnutrition.

Drudgery is generally conceived as physical and mental strain, agony, fatigue, monotony and hardship by human being, while all these result in decline in living and working conditions affecting men and women alike. The plight of the women in this regard is alarming as they are constrained by illiteracy, poor health, unemployment, low technical know-how and skills. Most drudgery prone tasks for women in agriculture are cutting/uprooting, transplanting, weeding, sowing & post harvest tasks like manual threshing of maize, millet & pulses, sieving and cleaning. Besides these activities the collection and carrying head load of cow dung for preparing dung cakes or manure; collection and balancing head load of fuel wood, fodder and water pots are also drudgery laden tasks.

Women are also considerably exposed to biological, chemical, physical and mechanical hazards. Due to use of agro-chemicals women are exposed to gynecological infections and her reproductive health is affected. Long hours of standing in mud and water during paddy transplantation causes body ache, intestinal and parasite infections. Inhalation of dust during post harvest processing, pesticide residues during crop nurturing cause respiratory and digestive disorders. Many of the health hazards are unrecognized and undiagnosed as women do not make complaints and as such they continue to remain as indispensable human resource in agricultural production process. (Qualitative database on rural women - 2003). Hence it is essential to know the disorders farmwomen face while working in farming or allied activities. Considering this, the effort was made to find out the health problems faced by the farmwomen with the following objectives –

1. To assess the anthropometric measurements of urban, rural and tribal farmwomen.
2. To compare health problems or health disorders of the respondents.
3. To know about the occurrence of chronic diseases of the respondents.

MATERIAL AND METHODS

The study was carried out from two agro-climatic zones of Maharashtra. Nanded district was selected from Central Maharashtra Plateau zone and Nagpur district was selected from Central Vidarbha zone. This research consist sample of 600 farm women, 200 each from urban, rural and tribal areas. It was easy to get sample of farm women from rural and tribal areas but difficult from urban area. Hence the localities of the urban area, where actual farming or farm related activities were done by the women, were selected. Data were collected by administering the pre-tested interview schedule. All the respondents were interviewed personally by the investigator at work spot, which enabled her to get the first hand information. In the present study, anthropometric measurements of the respondents, health disorders experienced by them and occurrence of chronic diseases were studied. Body height (cm) and weight (kg) were the two anthropometric measurements recorded for all the sample women by using standard procedures (Jelliffe, 1966).

To find out the health status of the respondent, the Body Mass Index (BMI) was calculated from the recorded measurements of body weight and height of a woman. The ratio of weight (kg) and height² (cm) is referred as Body Mass Index (BMI). BMI is calculated by using the following formula –

$$\text{Body Mass Index} = \frac{\text{Weight in kg}}{(\text{Height in cm})^2}$$

On this basis, these selected women were classified into three groups as under weight (< 18.5 BMI), normal (18.5 – 24.9 BMI) and over weight women (25 – 29.9 BMI) as per James et al. (1988).

The respondent was asked whether she was suffering from any health disorder. The diseases were categorized as digestive diseases, general diseases, respiratory diseases, gynec diseases, skin diseases and other diseases. She was also asked whether she was suffering from any chronic disease, like diabetes, TB, blood pressure etc.

RESULTS AND DISCUSSION

Average anthropometric measurements of the respondents

It is clear from the table that average height of the urban women was more as compared to the women of other two areas. It was 152.27 cm. The minimum noted height was 140 cm and maximum was 165 cm. Average heights of tribal and rural women were 149.58 cm and 146.52 cm respectively. It was noticed that minimum height of tribal women was 122 cm and maximum noted height was 166 cm. likewise rural women's minimum height was found to be 123 cm and maximum height was observed as 162.5 cm. When the body weights of the respondents from three areas were compared, it was noticed that

average weight of urban women was also more i.e. 58.19 kg. The minimum weight observed was 36.5 kg while maximum weight was 87 kg. Average weight of tribal women was 48.10 kg and that of rural women was 47.27 kg. Minimum weight of the tribal women was noticed as 32 kg and maximum was 69 kg. Whereas rural women's minimum weight was also noted as 32 kg and it was observed that their maximum weight was 72 kg. Obviously the BMI of urban women was high i.e. 25.07 which is in the obese category. Lowest BMI assessed was 15.19 and highest was 38.66. Rural respondents' average BMI was found to be 22.04 while tribal women's average BMI was 21.52 which are in the normal category. Minimum BMI of rural women was 15.90 and highest was 31.98 whereas tribal women's lowest and highest BMI noted were 15.77 and 30.66 respectively.

Table No. 1 Average anthropometric measurements of the respondents

Sr. No.	Urban (n = 200)	Rural (n = 200)	Tribal (n = 200)			
	Particulars	Average	Particulars	Average	Particulars	Average
1	Height (cm)	152.27	Height (cm)	146.52	Height (cm)	149.58
2	Weight (kg)	58.19	Weight (kg)	47.27	Weight (kg)	48.10
3	Body Mass Index	25.07	Body Mass Index	22.04	Body Mass Index	21.52

The observation in case of average height of urban women lends support to the finding of the study of Bhojar et al. (2014) and is somewhat different to the heights recorded by Bhalerao (2002) and Victor et al. (2002). The finding in case of average weight of the rural and tribal respondents is quite nearer to the finding of Victor et al. (2002) and Bhojar et al. (2014) and it differs to the result of Bhalerao (2002). The assessment in case of BMI is found in line with the result of Bhojar et al. (2014) and this result is found to be varying with the finding of Taneja (1998) and also with Bhalerao (2002) who observed the BMI values of women ranged in between 13.5-21.5.

Health problems or health disorders of the respondents

Assessment of the health status of the respondents was studied by assessing their health problems or health disorders (Table 2). The diseases were categorized as digestive diseases, respiratory diseases, general problems, gynecological problems, skin diseases and other diseases. It can be illustrated that majority of the rural (94.00 %) and tribal (92.50 %) and more than three fourth (79.50 %) of the urban respondents were suffering from one or other type of the disorder whereas slightly more than one fifth (20.50 %) of the urban and only 7.50 and 6.00 per cent of tribal and rural women respectively reported that they did not have any complaint about their health.

These results were contradictory to the study of Bhalerao (2002) whose observation was majority of the respondents didn't have any general health complaints about their health.

It can be said that except acidity, the occurrence of digestive disorders in the respondents from all the three areas was almost same. For urban women it was 1.00 – 7.00 per cent, in rural women it was 0.50 – 8.00 per cent and in tribal women it was noted as 0.50 – 7.00 per cent. It was seen that the women from all the three areas were suffering more from the disorder acidity than any other digestive disorder. It was found that 24.50, 13.50 and 5.50 per cent of urban, rural and tribal women respectively were facing this problem. The result in case of digestive disorders is in line with Bhalerao (2002)

Occurrence of respiratory disorders among the tribal women was slightly more than other two areas. For urban respondents it ranged between 0.50 – 4.00 per cent. It was also found that 0.50 – 5.00 per cent of rural and 0.50 – 12.50 per cent of tribal women respectively were facing the problem of respiratory disorders like cough, cold, nose infection, asthma, sore throat and ear infection.

Table No. 2 Health problems or health disorders of the respondent

SN	Type of the Disease	Urban (n=200)	Rural (n=200)	Tribal (n=200)			
	- Suffering from disorders	159	79.50	188	94.00	185	92.50

	- No problem	41	20.50	12	6.00	15	7.50
1	Digestive diseases Constipation	6	3.00	6	3.00	1	0.50
2	Diarrhea	2	1.00	0	0.00	4	2.00
3	Dysentery	4	2.00	1	0.50	0	0.00
4	Jaundice	2	1.00	0	0.00	0	0.00
5	Worm infection	6	3.00	0	0.00	1	0.50
6	Acidity	49	24.50	27	13.50	11	5.50
7	Stomach ache	14	7.00	16	8.00	15	7.50
8	Respiratory diseases Cough	7	3.50	8	4.00	13	6.50
9	Cold	8	4.00	10	5.00	25	12.50
10	Nose infection	4	2.00	1	0.50	7	3.50
11	Asthma	4	2.00	3	1.50	2	1.00
12	Sore throat	1	0.50	3	1.50	5	2.50
13	Ear infection	2	1.00	3	1.50	1	0.50
14	General diseases Weakness	39	19.50	113	56.50	90	45.00
15	Joint pain	38	19.00	142	71.00	143	71.50
16	Back ache	44	22.00	147	73.50	150	75.00
17	Pain in neck	24	12.00	124	62.00	104	52.00
18	Head ache	48	24.00	124	62.00	112	56.00
19	Pain in legs	49	24.50	143	71.50	128	64.00
20	Knee pain	35	17.50	74	37.00	34	17.00
21	Pain in waist	51	25.50	155	77.50	151	75.50
22	Pain in hands	23	11.50	119	59.50	123	61.50
23	Fever	8	4.00	32	16.00	20	10.00
24	General fatigue	60	30.00	49	24.50	61	30.50
25	Gynic problems White discharge	7	3.50	8	4.00	6	3.00
26	More/less discharge during menstrual cycle	30	15.00	28	14.00	15	7.50
27	Discomfort (pain in stomach, waist, legs during menstrual cycle)	68	34.00	42	21.00	43	21.50
28	Skin diseases Skin infection	12	6.00	12	6.00	6	3.00
29	Hair fall	42	21.00	50	25.00	57	28.50
30	Other Tooth ache	15	7.50	30	15.00	23	11.50
31	Eye problems	11	5.50	44	22.00	41	20.50
32	Any other	25	12.50	11	5.50	9	4.50

The selected women from three areas were mainly suffering from the general diseases like back ache, joint pain, head ache, pain in legs, pain in waist and general fatigue. Occurrence of general disorders in urban women was found to be in the range of 4.00 to 30.00 per cent whereas in rural women it was found in between 16.00 to 78.00 per cent and range for tribal women was 10.00 to 76.00 per cent.

The results are in accordance with the results of Dhillon (1984) and Bhalerao (2002).

It can be expressed that rural and tribal women were facing more to the general disorders than that of urban women. It may be due the fact that majority of the rural and tribal women were engaged in actual farm work. These problems were due to continuous bending work posture while working in farms. Studies have shown that weeding is the main activity performed by the women all over Maharashtra. Knee, legs and hand pains were due to weeding activity and head ache was due to continuous working under sun rays.

Urban women were found to be engaged more in the farm related work and not to the actual farm work. They were engaged mostly in the farm related activities like poultry or goat keeping, dhal making, selling agricultural implements, preparation of food products like turmeric, chilli powder, making masale, selling vegetables, preparing and selling garlands, dairying, preparing and selling preserves like papad, vermicelli etc. Another reason was that the urban women were found to

be more engaged in post-harvest activities which are carried inside the home. Hence they faced comparatively less to these problems. It can be stated that 3.50, 4.00 and 3.00 per cent of the urban, rural and tribal women respectively were facing the gynec problem as white discharge.

More/less discharge during menstrual cycle is another gynec problem faced by 15.00 per cent urban, 14.00 per cent rural and 7.50 per cent tribal women while 34.00 per cent urban, 21.50 per cent tribal and 21.00 per cent rural women were suffering from discomfort during menstrual cycle (pain in stomach, waist and leg).

Skin infection was the health problem of 6.00 per cent each of urban and rural and 3.00 per cent of tribal respondents. Problem of hair fall was faced by 21.00 per cent of urban, 25.00 per cent of rural and 25.50 per cent of tribal respondents. These results are in line with Bhalerao (2002).

It was found that 7.50 per cent urban, 15.00 per cent rural and 11.50 per cent of tribal women had the problems related to tooth while 5.50 per cent urban, 22.00 per cent rural and 20.50 per cent of tribal women had the problems regarding eyes.

It can be portrayed that 12.50 per cent of the urban, 5.50 per cent of rural and 4.50 per cent of tribal women were found to be suffering from other than the above mentioned health disorders like vomiting, kidney stone, piles, indigestion, anaemia, allergy, spondylitis, thyroid, arthritis etc. The finding related to tooth ache is similar to Sunita Kumari (2000).

Occurrence of the chronic diseases

As regards area wise occurrence of the chronic diseases (Table 3) like diabetes mellitus, TB, BP or heart disease, it was noticed that 14.50 per cent of the urban women were facing the problem of one or more of these diseases. It was satisfactory to note that only 1.00 per cent of rural and 3.50 per cent of tribal respondents were suffering from these chronic diseases. The reason behind it is majority of the urban women were involved in the occupation like service and enterprise which are not laborious work patterns.

Due to the luxurious life style and different nature of work, obesity is the common problem among the urban women due to this reason they had to face the health disorders like diabetes or hyper tension whereas majority of the rural and tribal women's main occupation was farm labour. They worked on the farms which is very laborious. Hence they did not face the problems arising due to obesity. As earlier stated, average BMI for urban women was found to be 25.07 which indicated their obesity. BMI for rural and tribal women were 22.04 and 21.52 respectively which were in normal category.

Table No. 3 Occurrence of the chronic diseases

Sr. No.	Occurrence of the Disease	Urban (n=200)		Tribal (n=200)			
		Freq.	%	Freq.	%	Freq.	%
1	No	171	85.50	198	99.00	1937	96.50
2	Yes	29	14.50	2	1.00	37	3.50

These results are in line with Bhalerao (2002) and the findings reported in Annual Report – 2008-2009 National Institute of Nutrition, ICMR, Hyderabad who reported that occurrence of chronic diseases in women was found to be less irrespective of their socio economic status.

CONCLUSION

Average height of the urban women was more as compared to the heights of the women of other two areas i.e. 152.27 cm. Average heights of tribal and rural women were 149.58 cm and 146.52 cm respectively. Body average weight of urban women was also more i.e. 58.19 kg. Average weight of tribal women was 48.10 kg and that of rural women was 47.27 kg. The BMI of urban women was high i.e. 25.07 which is in the obese category. Rural respondents' average BMI was found to be 22.04 while tribal women's average BMI was 21.52 which are in the normal category.

Except acidity, the occurrence of digestive disorders among the respondents from all the three areas was almost same. Percentage of occurrence of acidity was more among urban women. Occurrence of respiratory disorders among the tribal women was slightly more than other two areas. It can be also seen that rural and tribal women were facing more to the general disorders like pain in different body parts,

weakness and general fatigue than that of urban women. Occurrence of gynec disorders was more in urban women than that of rural and tribal. Skin infections occurred more among the rural and tribal women than urban women. Rural and tribal women were facing the problems of tooth and eye infections more than urban women due the unhygienic conditions. Occurrence of other diseases was more in urban women. Occurrence of chronic diseases like diabetes mellitus, TB, BP or heart disease was more in urban women.

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