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THE RELATIONSHIP BETWEEN NUTRITIONAL KNOWLEDGE AND THE HEALTH STATUS OF THE WORKING AND NON-WORKING PREGNANT WOMEN OF JAIPUR CITY

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ABSTRACT

Pregnancy is a crucial period of woman's life where socio demographic factors and other factors like lifestyle pattern, food choices and dietary habits, determine the health of future generation¹. Nutritional knowledge also plays an important role in giving birth to a healthy baby. So, the aim of the present study was to assess the health status of the working and non-working pregnant women and relate it with their existing nutritional knowledge. A total of 100 pregnant women visiting two private hospitals of Jaipur city were selected for the study. Out of the 100, 50 were working and 50 were non-working. A pre-tested structured questionnaire was used to assess the nutritional knowledge, life style pattern and dietary habits of the subjects. The nutritional knowledge of the working pregnant women was observed to be high and the health status was also good in comparison to non-working pregnant women. It was observed that majority of the pregnant women consume cereal based diet and pulses were consumed in less amount among both the groups. The consumption of milk and its products and green leafy vegetables was high among both the group. High prevalence of anemia was found among both the groups. 48% of non-working and 34% working were mildly anemic; 28% (non-working) and 50% (working) were moderately anemic and 24% (non-working) and 16% (working) were non-anemic. No pregnant women was observed to be severely anemic.

KEYWORDS

Nutritional Knowledge, Dietary Habits, Pregnancy and Hemoglobin level.

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INTRODUCTION

Pregnancy is a prominent event in a woman's life, able to transform her life forever. It is a physiological state, which produces several normal and expected changes, in all the maternal organ systems. The nutrient demands of the fetus developing must be met in addition to those for maintenance of the adult women; this calls for quality nutrition both before and during pregnancy².

Poor maternal nutrition results in low birth weight infants which is a major cause of the increased rate of maternal and child morbidity and mortality. Maternal nutrition plays a fundamental role for healthy pregnancy and fetus. Nutritional requirements increase tremendously during pregnancy as the expectant mother not only has to nourish her but also the growing fetus³. The nutrient needs are also increased for the development of maternal organs such as uterus, placenta and breast tissue and to build up body reserves to be utilized at the time of delivery and subsequently during lactation⁴. In comparison with the non-pregnant, non-lactating women, women during second and third trimesters of pregnancy need extra energy, protein, fat, calcium, iron as well as the B-group vitamins especially thiamine, riboflavin, folic acid and vitamin B₁₂⁵.

Some mothers are in the habit of taking alcohol, drugs and excess amounts of tea and coffee. They may also be habitual smokers. These practices have an adverse effect not only on their own health but also on the outcome of pregnancy⁶. Keeping in mind the above mentioned scenario of the today's world the present study was carried out to assess the relationship of nutritional knowledge and the health status of working and non-working pregnant women of Jaipur city.

MATERIAL AND METHODS

A comparative study was carried out in two private hospitals of Jaipur city. A total of 100 pregnant women in the age group of 25-35 years were selected from two private hospitals of Jaipur city, Out of the 100, 50 (working) and 50 (non-working) pregnant women in 2nd or 3rd trimester were selected by random sampling method. The hospitals selected were Saket Hospital, Meera Marg, Mansarovar and Jain Clinic, Pratap Nagar by convenience sampling method. A pre-tested structured questionnaire was used to collect the information's related to nutritional knowledge, health status, dietary habits and life style pattern of pregnant women of both the groups. Food frequency table was used to collect the information about dietary habits and consumption pattern. Dietary assessment was carried out to assess

the food consumption pattern of the pregnant women. Anthropometric assessment was done and under this height and weight of the selected subjects was taken and mean was calculated.

RESULTS AND DISCUSSION

The collected data was compiled, tabulated, statistically analyzed and interpreted. Analysis of the socio- demographic data of the respondents indicated that majority of the working pregnant women aged between (30-34yrs) while non-working pregnant women aged between (25-28yrs). The educational level of 44% of working and 48% of non-working were graduate followed by 56% (working) and 52% (non-working) were post graduate. Majority of the working (90%) and non-working (98%) pregnant women belonged to Middle Income Group (MIG) followed by 10% of working and 2% of non-working women who were from High Income Group (HIG).

Fifty eight percent of working and 46% of non-working women hailed from joint families while mostly 42% (working) and 54% (non-working) pregnant women hailed from nuclear families. The incidence of miscarriages in both working and non-working pregnant women was observed to be low. The anthropometric measurement of the respondents in both the groups revealed that the mean height of the working women was 165.4cms and the mean height of non-working women was 187.22cms.

The average mean weight of the working women was 64.1kgs ranging from (50-80kgs) and the average mean weight of non-working women was 38.5kgs ranging from (40-80kgs) during 2nd and 3rd semester of pregnancy. High prevalence rate of anemia was observed among both the groups of pregnant women. Only 16% of working and 24% of non-working were reported to be normal. Both working (34%) and non-working (48%) were found to be moderately anemic with their haemoglobin level ranging from 7.0-9.9 g/dL. 50% of working and 28% of non-working were categorized as mildly anemic with Hb ranging from 10.0-11.0 g/dL. A strong association was detected between hemoglobin status and supplement intake⁷. Anemia was a moderate public health problem among pregnant women⁸.

Majority of the working (74%) and non-working (76%) pregnant women showed positive attitude towards daily exercise such as walking, yoga etc. Walking on daily basis was most commonly preferred exercise by both the groups. The duration of exercise was varied among both the groups. It was observed that working women devoted more time to exercises as compared to non-working women as they were more conscious about their health and image in comparison to non-working women. Mainly, cooking was preferred by majority of the non-working women (52%) and other than that women's were engaged in all types of household work such as dusting, washing clothes, sleeping, shopping etc. 64% of the working and 80% of the non-working pregnant women were vegetarian in their dietary habit while only 36% of working and 20% of non-working were non-vegetarian.

From the study, it was observed that non-working (40%) and working (24%) women consumed more than three meals a day as they were pregnant and aware of the increased requirement during pregnancy, so they were in a habit of consuming three meals a day while the remaining respondents from both the groups consumed either 2 or 4 meals a day which showed that there was a lack of nutritional knowledge and dietary conception among pregnant women's of both the groups. The nutrition, well-balanced eating adherence was one of the greatest gifts pregnant women can give to her soon to be-born-baby⁹. As compared to non-working (45%), working (60%) pregnant women nibble more in between meals because they didn't take their meals properly and time gap between two meals was more. The pattern of skipping meals among working pregnant women (28%) was less as compared to non-working (48%) pregnant women. The most common reason of skipping meals as reported by both the groups under study was fatigue and lack of time. There was a significant relationship between educational attainment of pregnant women and their nutritional intake¹⁰. Mainly, homemade food was preferred by both working (66%) and non-working (96%) pregnant women.

Out of total, 96% of the working pregnant women showed their positive attitude towards consumption

of alcohol, tobacco etc while majority of non-working pregnant women (94%) were against this. The feeling of PICA was less among both the groups of pregnant women as they were aware of the side effects of eating mud, chalk etc which may lead to further complication during pregnancy. Both the groups under the study preferred to eat food outside home. Majority of the pregnant women were satisfied with their self- image. Watching T.V. and doing housework was commonly preferred by both the groups of pregnant women. 12% of working and 32% non-working pregnant women faced constant and daily hassles. 48% of working and 42% of non-working pregnant women didn't change their cooking oil while 42% of working and 30% of non-working pregnant women change cooking oil on yearly basis; 10% (working) and 28% (non-working) of the sample under study change the cooking oil on monthly basis.

Mostly, Indian food was consumed by both the working and non-working groups of pregnant women. The consumption of fried foods once a week was less common among working women because they were aware of the fat deposition in the body which leads to complications during pregnancy.

Both the working (34%) and non-Working (58%) pregnant women followed fasting and the commonly consumed food items during fasting were fruits salad and beverages. Both the groups of pregnant women were satisfied with their sleeping pattern.

Food frequency

The consumption of cereals was found to be more among both the groups. The consumption of pulses was observed to be high among working pregnant women when compared to non-working pregnant women. Soybean was readily consumed by working pregnant women while lentil and Bengal gram were commonly consumed by non-working pregnant women. The consumption of green leafy vegetables was high among both the groups of pregnant women. Spinach, *bathua* leaves were found to be commonly consumed. Other than green leafy vegetables cucumber, bottle gourd, beans, cabbage, cauliflower were also consumed by both the groups of pregnant women. The consumption of potato was observed to be the highest among the vegetables. Walnuts and

almonds consumption was observed to be high among working women. They usually nibble in between the meals. Non-working pregnant women consumed more of coconut as it is a good source of calcium. Consumption of coconut water was also observed to be high among non-pregnant women. Pomegranate was highly liked and consumed by majority of the pregnant women as it is a good source of iron followed by banana being energy dense, guava and orange. Consumption of papaya was almost negligible among both the groups may be because it is supposed to cause abortion.

Milk as such was consumed daily by both the groups of pregnant women and other way of consumption of milk was in the form of tea or coffee.

Refined oil was mostly consumed by both the groups. Sugar was consumed in tea or coffee and the rate of consumption of jaggery was also found to be high. The reason could be as it is a good source of iron and provides warmth. Consumption of egg was high among both the groups of pregnant women. Other than that chicken was consumed by non-working pregnant women.

Table No.1: Food Consumption Pattern of Both the group of Pregnant Women

S.No		Working		Non-working	
		Yes	No	Yes	No
1	Drink two liters of water	54%	46%	72%	28%
2	Follow Fasting	34%	66%	58%	42%
3	Practice good posture while sitting, walking	92%	8%	76%	24%
4	Allocate sufficient time for yourself	54%	46%	46%	54%
5	Satisfied with sleeping pattern	74%	26%	74%	26%
6	Intake of packed food items is good for healthy pregnancy	14%	86%	30%	70%
7	Importance of fruits during pregnancy	96%	4%	100%	-

Table No.2: Nutritional supplements taken by working and non-working pregnant women

S.No	Category	Protein	Calcium	Vitamins	Iron	None	Other
1	Working	20%	32%	15%	23%	6%	4%
2	Non-working	42%	20%	10%	20%	6%	2%

Table No.3: Habit of Smoking, chewing tobacco and drinking alcohol

S.No	Category	Yes	No
1	Working	96%	4%
2	Non-working	6%	94%

CONCLUSION

From the data, it was concluded that nutritional knowledge during pregnancy was very important both for the mother and the fetus. The nutritional knowledge of working women was high in comparison to non-working pregnant women and the health status of working women was also observed good in comparison to non-working pregnant women. It was observed from the study that consumption of fruits and green vegetables was high among working pregnant women while more cereal

based diet was consumed by both the groups of pregnant women.

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CONFLICT OF INTEREST

We declare that we have no conflict of interest.

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