A Case Study of Level and Variation in the Knowledge about Healthy Diet among Homemakers

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ABSTRACT In majority of the households, decision on items to cook is done predominantly by housewives and thus, their knowledge about healthy food is a key factor in deciding food consumption pattern and hence, overall family health. The current study, based on data collected through a semi-structured interview schedule from 84 currently married women of the district of Balasore in India, selected through a multi-stage sampling process, aimed at analyzing the level of and factors associated with women’s awareness about healthy diet and eating practices. It was observed that affluent, educated and urban respondents were more aware of healthy eating habits, while the large chunk of economically and educationally disadvantaged samples were backward in their awareness level and more seriously; such respondents were highly complacent about the healthiness of their diet. All it asks for is a need and behavior based nutrition education intervention especially in rural areas of the district.

INTRODUCTION

In most part of the developing world, involvement of women in making important household decisions is usually negligible. However, many empirical studies conducted in India suggest that in majority of the households, decision on what to be cooked for daily meals is done predominantly by daughter in laws/women (Routray et al. 2017). Thus, in a given economic structure and environmental setup, nature of food consumption will be largely controlled by the women. As such, knowledge of women about healthy food and eating practices will be a key factor in deciding the actual food consumption pattern and hence, overall health status of the family.

It is well known and documented that diet and nutrition play an important role in maintaining health of individuals. As such, diet quality and dietary patterns are poor across much of the world and contribute substantially to the non-communicable disease burden (WHO 2013 cited by Arena et al. 2015). Both medical as well as socio-economic surveys all around the globe have revealed that physical inactivity and poor diet were significantly associated with poor self-reported health (Liu et al. 2017). In fact, in the words of Shelton (2005), people’s health is affected greatly by what they do and do not eat. Although researchers like McCrickerd and Forde (2016) have found that the sensory properties of foods and beverages are operational before, during and after an eating event and thus guide our preference, what we eat and what we do not is in fact, based on the decision affected by several interlinked factors. As listed by Bellsle (2005), such factors include biological determinants (hunger, appetite, and taste), economic determinants (cost, income, availability), physical determinants (access, education, and skill), social determinants (culture, family), psychological determinants (mood), as well as attitude, beliefs and knowledge about food. Amongst all, awareness and knowledge about healthy diet and eating practice appear to be one of the most important factors, from public health point of view.

It is generally believed that providing information about healthy diet can result in a positive change in the perception and attitude of the respondents towards healthy diet consumption (Verbeke et al. 2009). Further, it is possible that
through generating awareness, individuals may be more likely to make informed food choices and decisions conducive to their health despite their occupation (Eze et al. 2017). Usually, lack of nutritional knowledge acts as a barrier to choose healthy diet. Farahmand et al. (2012) in their study found that women’s lack of knowledge was an important barrier to healthy nutrition, as demonstrated by their inability to distinguish healthy foods. But, there are also some scholars, who do not accept the thesis completely. According to Paquette while the link between perception and behaviour can be inferred, it is not clearly supported in literature (Paquette 2005). Some scholars are of the opinion that although nutritional knowledge is necessary, but not sufficient for accurate healthful decisions and healthy eating (Miller and Cassidy 2012). Few researchers have failed to find any strong significant association between nutritional knowledge and dietary behaviour/habit. For example, studies done by Kigaru et al. (2015) on children and Spronk et al. (2014) on adult population could not find any strong association between nutritional knowledge and dietary practice. However, importance of focusing on raising the awareness level from policy perspective can never be denied off. According to WHO (2011), the conditions that promote unhealthy eating practices among individuals include a lack of adequate health and nutritional knowledge, and the acquisition of misinformation about health and nutrition matters. For effective healthy eating promotion, it is necessary to understand the attitudes towards and belief about nutrition of the general public (Kearney et al. 2001). In fact, in countries like UK, attempts to improve the nation’s health through dietary change have tended to centre on education under the assumption that providing people with the information necessary to choose healthy foods will ultimately lead to an improvement in diet (Parmenter and Wardle 1999).

Despite of the general agreement that an understanding of the general public’s attitudes towards and beliefs about food, nutrition and health are necessary for health promotion to be successful (Biloukha and Utermohlen 2001), actual understanding of consumers’ attitude are not properly researched in the areas of food safety and nutrition (Gibney 2004; Bektas et al. 2011). In fact, socio-economic differences in health-related behaviours have been widely studied in the Western populations, but are seldom considered in Asian populations (Fong et al. 2007). Similarly, the association between socio-economic status and non-communicable disease behavioural risk factors is well established in high-income countries, but it is not clear how behavioural risk factors are distributed within low-income and lower-middle-income countries (Allen et al. 2017). Understanding personal and socio-economic predictors of nutrition behaviour and dietary change is necessary for the development of effective public health nutrition education programmes (Drenowski 1997). As such, the necessity of such studies has become more pronounced in recent time. To explain the change in the type and amount of food with severe health consequences adopted by modern and urban societies, the term Nutrition Transition is widely used now which in the words of Popkin (2015), is explained as a remarkable shift in dietary behaviors associated with changes in the foods and beverages consumed along with reduced physical activity. Under the influence of globalization, rural areas of India are also facing a near similar transition. In the words of Misra et al. (2011), India is facing an “epidemic” of diet-related non-communicable diseases (DR-NCDs), along with widely prevalent under-nutrition resulting in substantial socio-economic burden on the nation. It has also been estimated that rise in nutritional morbidities like diabetes and obesity in the coming 10 years will be similar to that took place in USA in last 50 years (Dhar 2011). Therefore, there is definitely a great need of creating awareness, for which such studies become highly inevitable in all types of localities.

Targeting only the women in such analysis and studying their awareness level is primarily because of the type of role played by the women, especially in the developing world households. In the words of McGuigan (2012), in many families the responsibility of family health falls mainly on the mother and there is a complex relationship between family health, care, and mothering practices that has not been fully investigated. In fact, women are always found to be responsible for the nutrition of their family in any society or culture (Cakiroglu and Vashfam
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2007). Therefore, most of the researchers believe that creating awareness in women can influence the family members’ diet positively (Gawande 2011).

It has been well observed now that targeting entire mass simultaneously in development process won’t be successful. Each segment has different level of awareness and thus, demands to be targeted separately. A number of recent studies examining the variation in dietary knowledge and habit have revealed that variables, which account for differences in the knowledge and awareness of the population regarding healthy diet, may include education, occupation, income, household structure, age, marital status, type of residence etc. In the words of Bektas et al. (2011), the observed relation between age and nutrition knowledge has been found to be varying between studies. In their review, they found direct, inverse as well as curvilinear relationship (with middle aged groups having better knowledge) between age and nutrition knowledge. Lower level of knowledge has also been found to be associated with the lower educational attainment (Fasola et al. 2018; Liu et al. 2018), lower occupation (Lim et al. 2018) and lower income (Bookari et al. 2016; Lim et al. 2018) of the respondents as well as with those not living in urban areas (Payghan et al. 2014; Liu et al. 2018).

Need of nutritional education is well documented now. While some argue about the need of incorporating health education and information about healthy eating habits and lifestyle in the formal education system as a part of the school curriculum (Dapi et al. 2007), others feel that for improvement in overall diet quality, socio-economic interventions must be coupled with health education programmes (Beydoun and Wang 2008). However, it is a must to understand the level of awareness about healthy eating habits and factors associated with the variation in the awareness level in order to formulate policies to tackle the problems associated with bad eating habits.

METHODOLOGY

The target respondents for the study were currently married women, who usually take care of the feeding of their household. The study is purely based on primary data collected from different localities in Balasore, which is a northern coastal district of the state of Odisha, located in the eastern coast of India. Selection of respondents for the study followed a three stage sampling process. There are four urban centres in the district (One Municipality and Three Notified Area Councils) and Balasore being the only class I town in the district (rest of the urban centres were relatively small having more or less rural characteristics) was selected for the study purposively. In the second stage, slum population in Balasore which is around twenty two percent of the total city population, one slum pocket and three non-slum localities were selected randomly. Similarly, out of 289 rural Gram Panchayats (G.P) of the district, one G. P. (Baniadiha) was selected randomly in the first stage, followed by the random selection of three wards of the village in the second stage. Then, a house-listing operation was done in all the selected units to have an idea about the actual number of households in the selected wards/pockets and background characteristics of households like household size, presence of migrant in the household etc. By using the houselist, 42 households each were selected randomly from the selected village and urban centre, for the current study, in the third stage.

Most of the guidelines prepared regarding healthy diet have included ‘eating fruits and vegetables’, ‘less sugar’, ‘less fat/oil’ and ‘eating starchy/fibrous food’ as healthy eating habits (HEA 1997; Shelton 2005). Keeping in view the existing guidelines and looking at the usual food practice and availability in this part of the world, an interview schedule was prepared. Besides the questions on the eating habit, perception and other background characteristics of the respondents, a list of healthy dietary habit was put in order to measure the level of awareness of the respondents regarding healthy diet. The schedule was used to collect data from the wives of the working heads or major earning male members of the sample households from 84 households in total.

Composite indices help us in summarizing complex phenomena with a single indicator and are used extensively in social science research. In this study too, in order to represent the level of awareness of homemakers regarding healthy diet, an un-weighted diet score was computed.
for each individual by taking into consideration 13 items. For each item, a score of ‘1’ was given in case of the respondent being aware of the healthy food habit or ‘0’ in case of her not being aware of the same. As such, the theoretical range of the diet score was between 0 and 13 and a higher value of the Diet Score indicated towards possessing more knowledge about healthy diet. In addition, a standard of living index (SLI) was computed by taking into account the possession of 18 different household articles, availability of servant in the household and level of household income. Score ‘1’ was given to the respondent possessing a household article as well as having a servant in her household while scores of ‘1’, ‘2’, or ‘3’ were given to the respondents with low or medium or high level of self-reported annual income of the household, respectively. Theoretically, the SLI value was found to be within the range of 1 to 22. As possession of less than forty percent of the listed articles, with a low level of income and no servant in the household would result in a maximum SLI score of 8, any value between 1 and 8 was kept in the low standard of living group, whereas the ranges kept for medium and high standard of livings were ‘9 to 13’ and ‘14 or above’ respectively. Similarly, education was also categorised as ‘Low (Illiterate and Primary)’, ‘Moderate (Secondary and High School)’ and ‘High (Graduate and Post Graduate)’ for systematic analysis of the findings.

RESULTS

In the current study almost three-fourth of the respondents were of age 30 years or above and the median age was found to be 38 years. As far as education was concerned, urban non-slum respondents had the highest educational level (80% were graduates) followed by the rural women, whereas the educational level of the slum dwellers was extremely poor. There were very few working women (13.1%) and majority of the respondents were of low standard of living group, with the respondents from urban slums found to be with the worst possible condition (92% with poor living standard).

As shown in the Table 1, the level of awareness regarding various ways of making the diet healthier was extremely poor among the sampled women. Interestingly, most of the respondents (nearly 85%) reported about consumption of vegetables and fruits as a healthy food habit, while more than one-third of the respondents were of the opinion that consuming fish can be a healthy food habit. Very few of the respondents were aware of the possible harm in consuming more sugar, oil and fried food, which, in fact, is a major issue of concern in this phase of nutritional transition. Level of awareness was not at all satisfactory among the women in the study area. Further, irrespective of the educational attainment, age, standard of living and place of residence etc. many important dietary practices like reducing consumption of junk food, chocolate, ice cream, more consumption of fresh food and including fruit juice, vitamin and mineral supplements in the food, were hardly reported by the respondents. Interestingly, less than five percent of the respondents were aware of the problems associated exclusively

| S.No. | Healthy food habit                                      | Percentage | 95% Confidence Interval |
|-------|--------------------------------------------------------|------------|-------------------------|
| 1     | Consuming more fruits and vegetables                   | 84.5       | 77                      | 92          |
| 2     | Consuming more fish                                   | 35.7       | 25                      | 46          |
| 3     | Consuming less oil/ fried food/ cholesterol etc.      | 19         | 9.5                     | 26.2        |
| 4     | Consuming less sugar                                  | 13.1       | 6                       | 20          |
| 5     | Consuming more salad                                  | 10.7       | 6                       | 20          |
| 6     | Consuming more water                                  | 9.5        | 4                       | 17          |
| 7     | Consuming more fresh food                             | 9.5        | 3                       | 16          |
| 8     | Consuming less junk food                              | 2.4        | -1                      | 6           |
| 9     | Consuming more vitamin and mineral supplements        | 2.4        | -1                      | 6           |
| 10    | Consuming more bread and less rice                    | 1.2        | -1                      | 4           |
| 11    | Consuming more fruit juice                            | 1.2        | -1                      | 4           |

Table 1: Percentages of respondents reporting about different ways to make the diet healthier

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with cholesterol and all of them belonged to either medium or high standard of living households staying in urban non-slum areas.

In another way of analyzing the awareness level, mean diet score was computed, which had a value of 2.0, indicating an extremely low level of awareness about healthy food/diet among the respondents. Arithmetic means of diet scores of different categories of samples were computed in order to identify the possible association between various factors and the level of awareness about healthy diet and the results are shown in Table 2.

In this study, working women respondents had significantly higher knowledge level regarding healthy food habit in comparison to their non-working counterparts. Further, as evident from Table 2, knowledge about healthy diet was found to be increasing significantly with increase in age, educational level of the respondents, husband’s educational level, standard of living and approximate monthly income of the households. In fact, diet score for the respondents in the highest categories of the mentioned variables were found to be more than double of those in the lowest categories, which showed the association of nutritional knowledge with the background variables like household income and age. Knowledge level was also found to be higher among the sample from those households, having a highly educated family member or urban non-slum location. Thus, affluent, educated, relatively older urban respondents with higher standard of living were more aware about healthy eating habits than their counterparts.

Table 2: Diet score across different background characteristics of the respondents

| S. No | Variable/Category                      | Mean±SD (95% CI) |
|-------|---------------------------------------|-----------------|
| 1.    | Age of the Respondent (in years)      |                 |
|       | Up to 30                               | 1.38± .590      |
|       |                                       | (1.11-1.65)     |
|       | 31 to 40                               | 1.71±1.045      |
|       |                                       | (1.36-2.07)     |
|       | Above 40                               | 2.92±2.544      |
|       |                                       | (1.90-3.95)     |
| 2.    | Type of Residence                      |                 |
|       | Rural                                  | 1.81±1.269      |
|       |                                       | (1.4-2.210)     |
|       | Urban slum                             | 1.17±4.05       |
|       |                                       | (.91-1.45)      |
|       | Urban non-slum                         | 2.60±2.298      |
|       |                                       | (1.74-3.46)     |
| 3.    | Education of the Respondent            |                 |
|       | Low                                    | 1.18±.395       |
|       |                                       | 91.01-1.36)     |
|       | Medium                                 | 1.80±1.141      |
|       |                                       | (1.31-2.27)     |
|       | High                                   | 2.67±2.23       |
|       |                                       | (1.91-3.42)     |
| 4.    | Husband’s Educational Level             |                 |
|       | Low                                    | 1.20±4.22       |
|       |                                       | (.90-1.50)      |
|       | Medium                                 | 1.70±1.725      |
|       |                                       | (1.06-2.34)     |
|       | High                                   | 2.43±1.810      |
|       |                                       | (1.86-2.99)     |
| 5.    | Most Educated Household Member          |                 |
|       | Up to High School                      | 1.37±6.88       |
|       |                                       | (1.10-1.64)     |
|       | Up to Graduation                       | 1.34±.745       |
|       |                                       | (1.08-1.61)     |
|       | Post-Graduation/Technical Graduation   | 3.52±2.312      |
|       |                                       | (2.57-4.47)     |
| 6.    | Standard of Living                     |                 |
|       | Low                                    | 1.43±775        |
|       |                                       | (1.23-1.66)     |
|       | Medium                                 | 2.08±1.605      |
|       |                                       | (1.42-2.74)     |
|       | High                                   | 4.00±2.892      |
|       |                                       | (2.16-5.84)     |
| 7.    | Occupation of the Respondent           |                 |
|       | Not working                            | 1.94±1.686      |
|       |                                       | (1.55-2.34)     |
|       | Working                                | 2.5±1.958       |
|       |                                       | (1.4-3.39)      |
| 8.    | Occupation of the Husband               |                 |
|       | Labour                                 | 1.1±316         |
|       |                                       | (.87-1.33)      |
|       | Agriculture                            | 1.63±885        |
|       |                                       | (1.15-2.10)     |
|       | Business                               | 1.37±761        |
|       |                                       | (1.00-1.74)     |
|       | Service                                | 2.76±2.216      |
|       |                                       | (2.02-3.50)     |

Table 2: Contd...

| S. No | Variable/Category                      | Mean±SD (95% CI) |
|-------|---------------------------------------|-----------------|
| 9.    | Major Source of Household Income      |                 |
|       | Agriculture                            | 1.47±834        |
|       |                                       | (1.00-1.93)     |
|       | Service                                | 2.69±2.178      |
|       |                                       | (1.99-3.40)     |
|       | Business and others                    | 1.36±731        |
|       |                                       | (1.07-1.65)     |
| 10.   | Approximate Monthly Income             |                 |
|       | Up to Rs.4000                          | 1.33±1.265      |
|       |                                       | (.80-1.89)      |
|       | Rs.4000 to Rs.10,000                   | 2.03±1.696      |
|       |                                       | (1.44-2.62)     |
|       | More than Rs.10,000                    | 2.60±1.936      |
|       |                                       | (1.80-3.40)     |

SD = Standard Deviation; CI = Confidence Interval

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Another major problem in this stage of nutritional transition is increasing consumption of fast food/junk food. In this study, as evident from Table 3, a huge variation with statistical significance in the preference of fast food was observed across different categories of education, residence type and standard of living of the households. The preference towards junk food was found to be significantly higher for the respondents with high educational level, urban non-slum residence and medium/high standard of living. In contrary, only 2.5 percent of urban slum dwellers, 22.7 percent of respondents with low educational level and 34.8 percent of respondents with low standard of living preferred fast food/junk food. Affluent and educated women, who happened to be more aware about healthy dietary habits, were more inclined towards fast food consumption, which made the entire issue more critical. In contrary, in case of other households with lower socio-economic strata, the situation was expected to be in a better side. However, a major issue of concern is whether their attitude can effectively guide their children and fellow household members towards avoiding or limiting the consumption of such food in reality, when fast food is easily available outside and at a much affordable price.

A lower level diet score indicated towards the possibility of a less healthy diet being consumed in the sample households. Adopting healthier food practice, beside other factors, also depend on the proper evaluation of their existing diet quality. However, in this study, only thirty-one percent of the respondents felt that their family diet could/should be healthier and the rest perceived their diet to be either very healthy or normal. Although, the association was not found to be statistically significant, less educated and younger respondents and those staying in rural or urban slums were found to be quite satisfied about the healthiness of their food. Amusingly, such respondents did have less diet scores. To be exact, ninety seven, ninety two and eighty two percent of rural, urban slums and less educated respondents respectively, did not feel the need of improving their diet quality, which definitely make the picture graver.

For a better statistical analysis, bivariate correlation coefficients were computed between the obtained diet score and selected background characteristics, which showed the existence of a highly significant statistical association among the variables. Though the strength of the associations were not extraordinarily high, the level of awareness in terms of the secured diet score was found to be positively associated with respondent’s age (±244*), educational level (±344*), husband education (±300**) and household standard of living (±466**).

Further, the respondents were categorized into two groups based on their diet scores (‘mean or less’ and ‘above mean’) and the chi-square values were computed between the diet score categories and major background classes. The result illustrated in Table 4 clearly indicated the existence of a statistically significant association.

| Table 3: Percentages of respondents preferring fast food/junk food across major background characteristics |
|--------------------------------------------------------|
| S. No. | Variable/Categories | Percentage |
| --- | --- | --- |
| 1 | Type of Residence** | | |
| | Rural | 54.8 |
| | Urban slum | 25 |
| | Urban non-slum | 86.7 |
| 2 | Education of the Respondent** | | |
| | Low | 22.7 |
| | Medium | 60 |
| | High | 86.5 |
| 3 | Standard of Living** | | |
| | Low | 34.8 |
| | Medium | 96.2 |
| | High | 91.7 |

*: p<=.001

| Table 4: Computed Chi-square values between Diet Score categories and major background variables |
|--------------------------------------------------------|
| Independent variable | Pearson Chi-square value | Degree of freedom | Level of significance |
| --- | --- | --- | --- |
| Residence | 4.853 | 2 | 0.088 |
| Age | 8.99 | 2 | 0.011 |
| Standard of living | 11.101 | 2 | 0.004 |
| Education | 8.991 | 2 | 0.011 |
| Working status | 0.033 | 1 | 0.856 |
| Husband’s education | 8.776 | 2 | 0.012 |
| Husband’s occupation | 12.63 | 3 | 0.006 |
| Income level | 7.689 | 2 | 0.021 |
| Highest educational level of any household member | 22.536 | 2 | 0 |

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tion of the diet score with variables like standard of living, highest educational level among the household members, age, education, husband’s education etc. While the associations with knowledge about healthy diet were significant at ninety nine percent in case of SLI and highest educational level of a household member, in case of age, education and husband’s education, the associations were found to be significant at a level of ninety five percent.

DISCUSSION

Not surprisingly, eighty one percent of the sample in this study was actively involved in the decision about what items to be cooked for the family and majority of them were taking the decision alone (70.2%). Such a finding itself points towards the fact that knowledge and awareness of women/ housewives regarding healthy food and eating habit can be a major factor in determining the household food consumption and overall health of the family members.

The primary finding of the study was that the level of awareness about healthy food and dietary habit was significantly lower among the women in the study area. Consuming more fruits and vegetables was the only healthy dietary habit about which most of the respondents were aware of. The computed diet score was also a sign of the lower awareness level among the sample.

Many studies have found age to be one of the most important variables accounting for difference in the nutritional and dietary knowledge of the women all over the globe. Although Dummeram and Jeewon (2013) had found younger women having higher nutrition knowledge in their study on Indo-Mauritian women, most of the available literature either on general population (Fasola et al. 2018; Liu et al. 2018) or on pregnant women (Bookari et al. 2016) have found nutrition knowledge to be positively associated with age. This study also found similar results with women above 40 years of age were found to be having better knowledge about healthy food.

Another important variable associated with better nutrition knowledge has been educational attainment of the respondent. Going in line with the existing literature (Bookari et al. 2016; Fasola et al. 2018; Liu et al. 2018) this study also found that women with higher educational attainment had better knowledge about healthy diet.

The current study also found that working women and women from urban areas, especially from the non-slum households had better nutrition knowledge; which was similar to the findings of other researchers (Payghan et al. 2014; Lim et al. 2018; Liu et al. 2018).

Many studies have found nutrition knowledge to be positively associated with household income (Bookari et al. 2016; Lim et al. 2018). In this study too, women from the households with higher standard of living and with husband working in service sector had better knowledge about healthy diet than their counterparts.

It was found that respondents from migrant households as well as from those having an out-migrant from their households had relatively higher awareness level and it was probably due to their exposure to the modern world and information system. Further, nutrition knowledge of the respondents in the current study was found to be positively associated with educational attainment of the husband and highest educational level of a member of the household. As such, presence of a better educated individual was possibly responsible for dissemination of proper knowledge in the household, resulting in a higher level of awareness about healthy diet among the women of such households. Economically and educationally disadvantaged samples in this study were also backward in their awareness level regarding healthy diet and that itself is a major issue of concern. More seriously, such respondents with lower educational level and standard of living were not much serious about their existing diet and very rarely reported about the possibility or requirement of making their family diet healthier than the existing ones.

Another major issue related to food consumption pattern all over the world at this point of time has been preference and frequent consumption of fast food/ junk food. Interestingly, in case of junk food preference, the link between nutritional knowledge and healthy dietary behaviour could not be established, as the affluent and educated respondents, who were more
informed about healthy dietary practices, were inclined more towards fast food/junk food.

The situation about the knowledge of healthy eating habits among the sample was not at all satisfactory as most of the women were not aware of the eating habits, which should be adopted and which should be avoided. Women with higher standard of living and those staying in urban non-slum areas were in a relatively better position. But the fact that more than two-third of the total population of India and more than four-fifth of the total population of Odisha stays in the rural areas does not leave any room for complacency. Further, among the urbanites, quite a high share of population stays in the slums and they were found to be in a precarious situation in connection to their dietary belief and practices.

Lack of knowledge about healthy food and unhealthy eating practices may create a nutritional disaster, if not checked in time. As such, there is serious need of steps to be taken by the government and civil societies for creating awareness about healthy eating habit, improving the existing knowledge of the target population and instilling the attitude of adhering to healthy eating practices in the general public. Many studies across the globe have found that a well-sourced, well-planned, targeted and coordinated nutrition education and intervention can improve knowledge, healthcare-seeking behaviours, and practices significantly (Saaka 2014; Pem and Jeewon 2015). Looking at the growing trend of unhealthy eating habits among both rural and urban population across the globe and its possible consequences, it is definitely a high time to create awareness about healthy diet and lifestyle among the less informed population groups. Further, sufficient skills must be developed among the target population so as to utilize the knowledge. In the words of Pem and Jeewon (2015), the scope of nutrition education is broader than just educating about nutrition in relation to personal health. In fact, the aim of nutrition education, besides disseminating knowledge on what is and what is not advantageous for our health, should also be to develop skills and habits facilitating effective utilization of this knowledge (Waszkowiak and Rogalewska 2007).

CONCLUSION

The small sample size does not allow for a generalization of the findings; but the issue of lack of proper knowledge about healthy diet cannot be ignored. Findings may change, when large cities are taken into consideration. But it has been ascertained from the study that problems do persist in the rural areas and smaller urban centres of the state. And due to the fact that food type and consumption pattern have significantly changed even in the rural areas, lower level of knowledge about healthy diet may make the issue more critical. All it asks for is increasing awareness and appropriate knowledge among the women and general public about healthy food and lifestyle through proper population education system. However, while planning such awareness campaign, it must be kept in mind that requirement of different subgroups of population would be different and elements of any such programme should be designed as per the requirement of the specific group.

One of the major limitations of the current study has been not analyzing the association between ‘knowledge about healthy diet’, ‘food consumption behavior’ and ‘overall health status’. Further scope of such studies lies in expanding the domain of research to incorporate the mentioned analyses with involvement of larger cities and more diversified respondents. Nevertheless, systematic evaluation of the existing level of awareness in this regard and providing basic knowledge about healthy diet for a positive change in their attitude should be an integrated part of population, health and nutrition education system, especially in rural areas.

RECOMMENDATIONS

Nutrition knowledge of women is considered to be an important factor affecting overall health of the household members. In this connection, based on the findings of the study, following recommendations may be made.

- Steps should be taken by different stakeholders including government, civil societies and social activists for creating awareness and improving the existing knowledge about healthy eating practices in the general public.
Nutrition education may be incorporated as a part of the curricula in the formal education system. 
Prioritization must be made to identify the groups those need to be targeted first as far as imparting nutrition education is concerned. In the current sample, such groups could be those staying in rural areas, in urban slums and those with lower educational level and standard of living.
People should be made aware of the harmful consequences of increasing consumption of fast food/junk food.
Educatng women as well as other individuals in a community regarding healthy eating practices and skills required for utilization of the knowledge must be a part of the public health care delivery system.

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