Factors Influencing Dietary Practices of Pregnant Women at Njoro Sub County Hospital, Nakuru County, Kenya

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Abstract

Worldwide, factors influencing maternal dietary practices has been a major issue of concern among pregnant women. This is because good dietary practices are important to the mother and the baby. Negative inappropriate dietary practices is one of the greatest challenges globally and in Kenya respectively. Inappropriate dietary practices may bring out several complications such as pre mature births, low birth weight and macrosomic babies among others. The current study therefore assessed the factors influencing dietary practices of pregnant women at Njoro Sub County Hospital, Nakuru County, Kenya. Descriptive survey research design was used in the study. Simple random sampling technique was used to sample 80 pregnant women attending ante natal clinic at Njoro Sub County Hospital, Nakuru County. Data was harvested through questionnaires to assess the dietary practices as well as dietary diversity of the expectant mothers. Data was analyzed using descriptive statistics, more so the use of percentages. The study indicates that more than half of the pregnant women attending antennal clinic at Njoro Sub County hospital had good dietary practices with 66.7% of the respondents consuming three meals a day with 13.3% having two meals. However, 20.0% of the pregnant mothers had one meal (others) daily. Moreover, a majority of the pregnant women attained women dietary diversity scores with 90% consuming more than 5 food groups (WDDS) with 10% not meeting the indicator of more than 5 food groups. Although starches were fairly consumed (chapatti at 33.3%, rice 56.7% and ugali 36.7% 2-4 times a week), animal proteins like chicken were less frequently taken. Additionally, vegetable and fruit intake was low (Managu/kunde 23.3%, spinach, 30%). The study recommends that pregnant women attending ante natal clinic at Njoro Sub County Hospital should be sensitized on the importance of balanced diet and encouraged to consume balanced meals three times a day. Furthermore, mothers should start kitchen gardening to enable them have diversified diets at a cheaper price. Secondly, the County government should establish policies and guidelines on diversity of diets and frequency of consumption to support mothers in maintaining appropriate and healthy dietary practices.

Keywords: factors, dietary practices, pregnant women

1. Introduction

1.1 Dietary Practices Among Pregnant Women Globally

Dietary practice refers to observable action or behavior of dietary habit (Nana & Zoma, 2018). It can be classified into two: good dietary practices and poor dietary practices. The following are some of the food groups recommended; fruits, vegetables, legumes, nuts, whole grains, unprocessed maize, millets, oats, wheat and brown rice. According to Diddana (2019) and Aishima, Begin and Aguayo (2020) total fat should not exceed 30% of total energy intake, limiting intake of free sugars to less than 10% of total energy intake, keeping salt intake less than 5g per day. On the other hand, poor dietary practices incudes high intakes of sodium rich foods, low intake of fruits, vegetables and whole grains according (Chakona & Shackleton, 2019; Super, Beulen, Koelen & Wagemakers, 2021).

Moreover, World Health Organization and United Nations Children's Education Fund (WHO/UNICEF, 2014) assert that during pregnancy, women's bodies undergo anatomical, physiological and biochemical changes. These biological changes increase women's nutrient requirement. Thus, pregnant women should eat diversified foodstuffs that contain an adequate amount of energy, protein, vitamins, minerals and water. Furthermore, WHO and UNICEF (2010) study carried out in north-western Ethiopia on dietary practices and associated factors during pregnancy showed that dietary practices among expectant mothers was sub-optimal with 39.3% of participants having good dietary practices whereas 60.7% of pregnant women, had poor dietary practices. Comparatively, conducted in southern Tanzania revealed that 69% of the women avoided fish and farm meats because of fears related to the animal's characteristic being transferred to the child or sterility (Lennox, Petrucka & Bassendowski, 2017).

1.2 Dietary Practices Among Pregnant Women in Kenya

The National Micronutrient survey (2011) indicated that 30% of pregnant women in Nyanza do not meet the increased requirements for nutrients during pregnancy (Obwocha, Mbagaya & Were., 2016). A study conducted in Uasin Gishu County, Kenya among Kalenjin pregnant women indicated that 60% of the respondents restricted consumption of animal organs specifically the tongue, heart, udder, and male reproductive organs, meat and eggs mainly because they were associated with big fetuses, less blood, lack of strength during birth, miscarriages or still births, and maternal deaths (Biney & Nyarko, 2017). Research findings also reveal that the intake of energy, iron, folic acid, calcium and zinc among pregnant women were very low. Based on the MUAC circumference, 19.3% of the participants were found to be undernourished (MUAC<23cm) (Kiboi, Chege & Kimiywe, 2016).

1.3 Consequences of Poor and Good Dietary Practices Among Pregnant Women

According to Salem, Eshra and Salem (2016) inadequate nutrition during pregnancy causes health problems for both the mother and fetus which include gestational anemia, hypertension, miscarriages and fetal deaths during pregnancy, preterm delivery and maternal mortality. For newborns, it can cause low birth weight and fetal intra uterine growth retardation.

Consequently, irreversible effects of poor maternal nutrition to the fetus are low intelligence quotient, low productivity and slow brain development (Beyamo, Erchafo. Tadesse, Sulamo & Sadoro, 2020). In contrast, consuming a nutritious diet during pregnancy is linked to good brain development, healthy birth weight and can reduce the risks of many birth defects such as cleft palate, spina bifida and club (Kabura, 2016).

2. Research Methodology

Descriptive survey research design was used in the study. The study area was Njoro Sub County Hospital, Nakuru County, Kenya. The target population were pregnant women in Nakuru County, Kenya, more specifically, pregnant women attending Antenatal clinic at Njoro Sub County Hospital. Simple random sampling technique was used to select a sample of 80 pregnant women from the target population. Data was collected through questionnaires designed to obtain information from the respondents on dietary diversity, food frequency, weight gain and nutritional status. Data analysis was done using descriptive statistics; means and percentages.

3. Results and Discussion

3.1 Dietary Practices of Pregnant Women

The findings in Figure 1 shows the meal

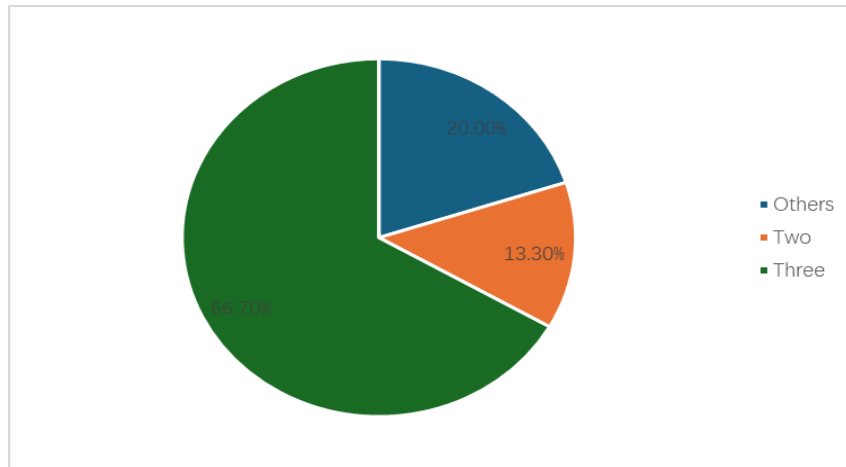consumption pattern of pregnant women attending ante natal clinic at Njoro Sub County Hospital.

Figure 1. Meal consumption pattern

The results in Figure 1 indicates that 66.7% of the pregnant women consumed three meals in a day, 13.3% consumed two meals while 20.0% had other meal. Apart from the data reflected on Figure 1, 33.3% skipped meals while majority (63.3%) did not skip meals. The meals which were mostly skipped were lunch at 26.7% and breakfast followed closely with 10.0%. Whereas, 63.3% had no valid reason for skipping meals, 33.3% had valid reasons most significantly, financial constraints.

3.1.1 Snack Consumption

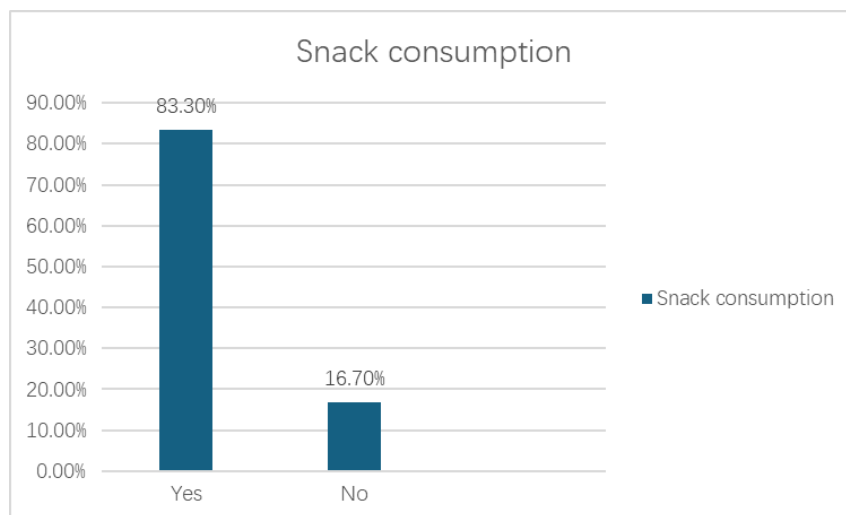The research findings on Figure 2 reveals the snack consumption rate of the pregnant women.

Figure 2. Respondent's Snack consumption

While a majority (83.3%) of the respondents consumed snacks, 16.7% did without snacks due inadequate finances to purchase snacks. Additionally, 80.0% stated the snacks they frequently consumed while 20% were not able to state the snacks they consumed.

3.1.2 Respondent's Allergy to food, Food Preference and Cravings

The study findings reveal that 90% of the respondents were not allergic to any food whereas 10% had allergic food reactions. Moreover, only 10% stated the type of food allergy while 90% could not clearly identify the kind of food that they were allergic to.

Comparatively, 53.3% of the respondents had different food preferences while 46.7% stated that they had no food preferences. Furthermore, 60% of the respondents stated the reason behind the food preference while 40% did not express their opinion on the reason for food preferences. While over half of the respondents (66.7%) had food craving, 33.3% were of the opinion that they did not have any craving for specific foods.

3.1.3 Dietary Diversity Score

Figure 3 shows the women dietary diversity scores (WDDS). To assess the women dietary diversity scores the 24-hour dietary recall method was used and the dietary diversity scores (WDDS) were computed using the 10 food groups as inscribed in the dietary diversity guidelines.
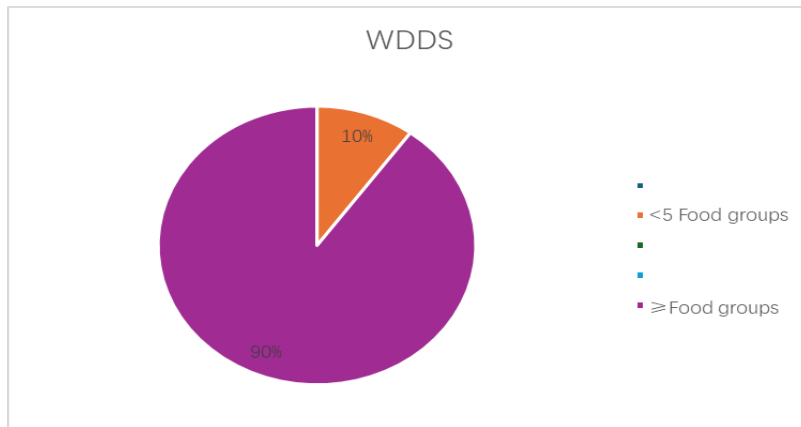

**Figure 3.** Pregnant Women Dietary Diversity Score (WDDS)

From the findings in Figure 3, the WDDS (women dietary diversity scores) was applied as a qualitative indicator to assess nutrient adequacy of the pregnant women attending antenatal clinic.

The results in Figure 3 points out that a majority (90%) of the pregnant women attained MDDS (more than 5 food groups) while only 10% did not meet the requirement of more than 5 food groups.

3.1.4 Food Frequency of Pregnant Women

The findings in Table 4 shows the food frequency of the respondents in terms of starches, proteins, fruits and vegetables.
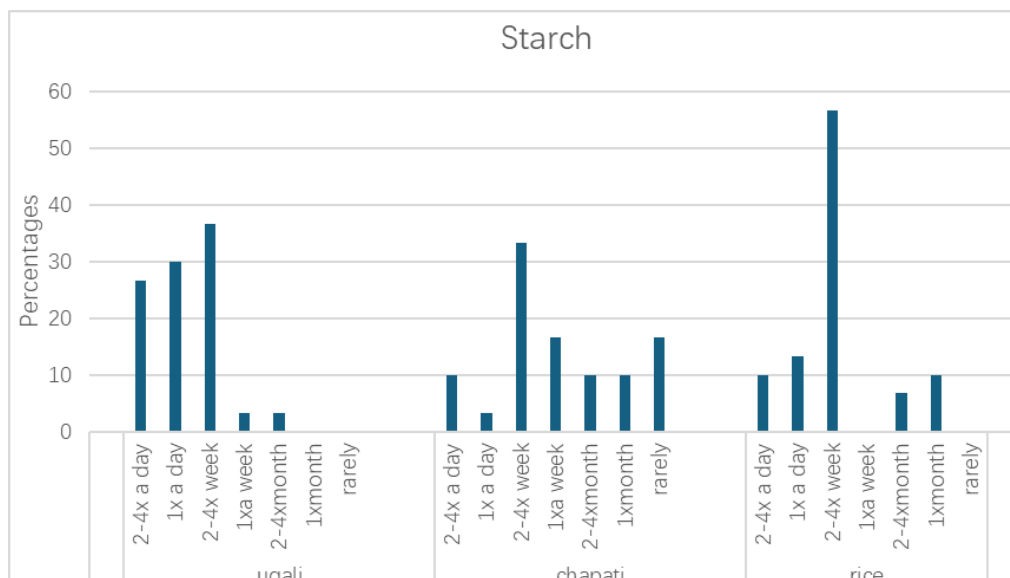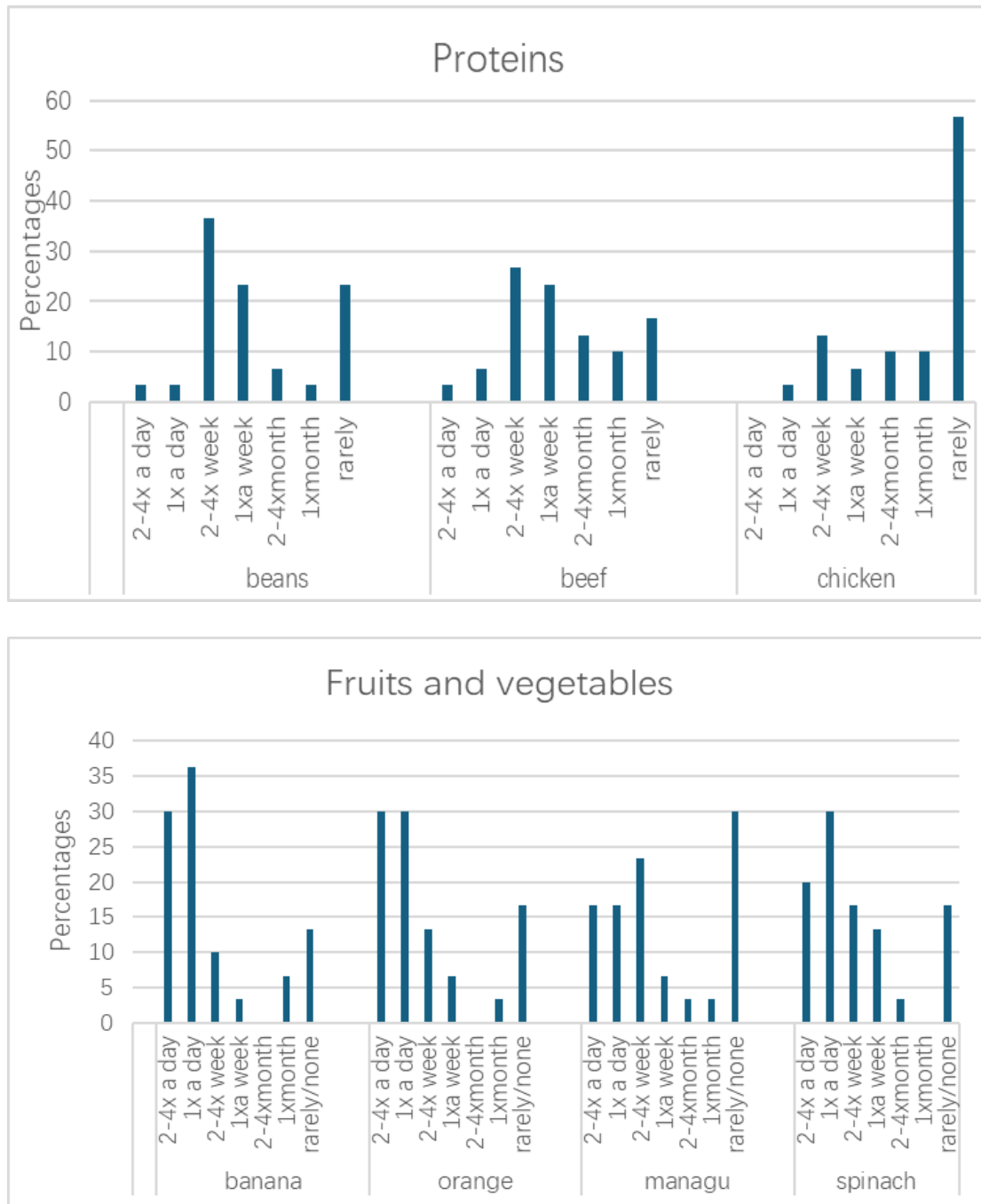
Figure 4. Respondents Food frequency (Starch, Proteins, Fruits and Vegetables)

The research results in Figure 4 indicates that starches were consumed by the respondents as follows; Chapati 33.3%, rice 56.7%, ugali 36.7% 2-4 times a week. Chips was rarely consumed.

The findings in Figure 4 further reveals the respondent's consumption of proteins; Beans 36.7%, beef, liver and matombo 26.7% 2-4 times a week while chicken was rarely consumed.

Whereas, fruits such as bananas were consumed at a rate of 36.7%, oranges were consumed at 30% every day. Furthermore, vegetables such as

managu/kunde were consumed at 23.3% two to four times a week while spinach was consumed at 30% daily.

4. Conclusion and Recommendations

In a nutshell, the findings of the current study indicates that more than half of the pregnant women attending ante natal clinic at Njoro Sub County hospital had good dietary practices with 66.7% of the respondents consuming three meals in a day with 13.3% having two meals and 20.0% one meal (others) a day. This study also reveals

that a majority of the pregnant women attained women dietary diversity scores with 90% consuming more than 5 food groups (WDDS) with 10% not meeting the indicator of more than 5 food groups. Moreover, the research results show that the expectant mothers consumed food from the dietary food groups (starches, proteins, fruits and vegetables). Although starches were fairly consumed (chapatti at 33.3%, rice 56.7% and ugali 36.7% 2-4 times a week), animal proteins like chicken were less frequently taken. However, vegetable and fruit intake was low (Managu/kunde 23.3%, spinach, 30%). Lack of Knowledge was found to be the main factor influencing the women dietary habits. The study recommends that pregnant women attending ante natal clinic at Njoro Sub County Hospital should be sensitized on the importance of balanced diet and encouraged to consume balanced meals three times a day. Furthermore, mothers should start kitchen gardening to enable them have diversified diets at a cheaper price. Secondly, the County government should establish policies and guidelines on diversity of diets and frequency of consumption to support mothers in maintaining appropriate and healthy dietary practices.

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