

The Nutrient Adequacy of Foods Eaten By Pregnant Women Attending Antenatal Clinic at Traditional Birth Homes

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Abstract: *Malnutrition among pregnant women is a phenomenon occurring in all parts of the world but the reasons vary from place to place. This study assessed the adequacy of foods eaten by pregnant women attending traditional birth home for antenatal care. A total of 71 pregnant women were recruited into the study, information their food intake was taken through 24-hr dietary recall and their food consumption pattern was assessed through the use of validated questionnaire. The data obtained was analyzed and compared with standards. The result revealed that the caloric intake was below the RDA(85%), while Calcium, Iron, vitamins A, E, C and folate intake were respectively 28%, 47%, 25%, 9% 31% and 44%. Cereals, roots and tuber were the most consumed foods. Therefore, nutrition education and adherence to vitamin supplements as prescribed by the doctor should be encouraged among pregnant women.*

Key words: *Pregnancy, nutrients, adequacy, food consumption*

I. Introduction

The period when a woman is pregnant is often looked at in isolation and not put in a larger content of the mother's overall health considering factors that have influenced her health. According to UNICEF (2000) (1), each year, more than half a million women die from causes related to pregnancy and childbirth. The mother's health before and during pregnant may be affected by genetics as well as malnutrition, acute and chronic disease, exposure to environmental toxins, and a number of other factors, The fetal origins hypothesis proposes that certain genes in the fetus may or may not be "turned on" depending on the environment that the mother is exposed to while pregnant (2).

Maternal nutrition and health is considered as the most important regulator of human fetal growth (3). A healthy mother can produce a healthy child. For women who are not well nourished, they are more likely to give birth to weak babies resulting in high infant mortality rate. A woman's normal nutritional requirement increases during pregnancy. Proper dietary balance is necessary to ensure sufficient energy intake for adequate growth of fetus without drawing on mother's own tissues to maintain her pregnancy. (4)

It is worthy of note that pregnant women knowledge of nutritional requirement and how these requirement can be met is dependent on the quality of antenatal care received during pregnancy. Quality antenatal care will help increase the chances of a good pregnancy outcome. However, many still prefer to receive antenatal care in traditional birth homes instead of hospitals. It is therefore important to assess the nutrient intake adequacy of pregnant women attending these birth homes because their nutrient intake is dependent on their nutrition requirement knowledge.

II. Methodology

The study was carried out in traditional birth homes in Owo. A total of 80 pregnant women attending antenatal clinic in the traditional birth home were recruited into the study. The consent of the subject was obtained before they were enlisted for the study and women who did not sign the letter of consent were excluded. A semi-structured questionnaire was used for data collection. The dietary assessment was carried out using 24hours dietary recall. The full and appropriate description of all foods eaten including drinks was recorded and converted to nutrients. The data collected was analyzed using statistical package for social sciences (SPSS) version 17.

III. Results

The study carried out among pregnant women show that their heads of household occupation are shown in the table 1 in which trading has the highest percentage of (60%) and hunting (5%) being the lowest.

Table 1 Occupation of heads of household of respondents

OCCUPATION	NO	%
CIVIL SERVANT	12	16.9
TRADER	29	40.8
FARMER	12	1.4
ARTISAN	20	28.2
FISHERMAN	6	8.5
HUNTING	3	4.2
TOTAL	71	100.0

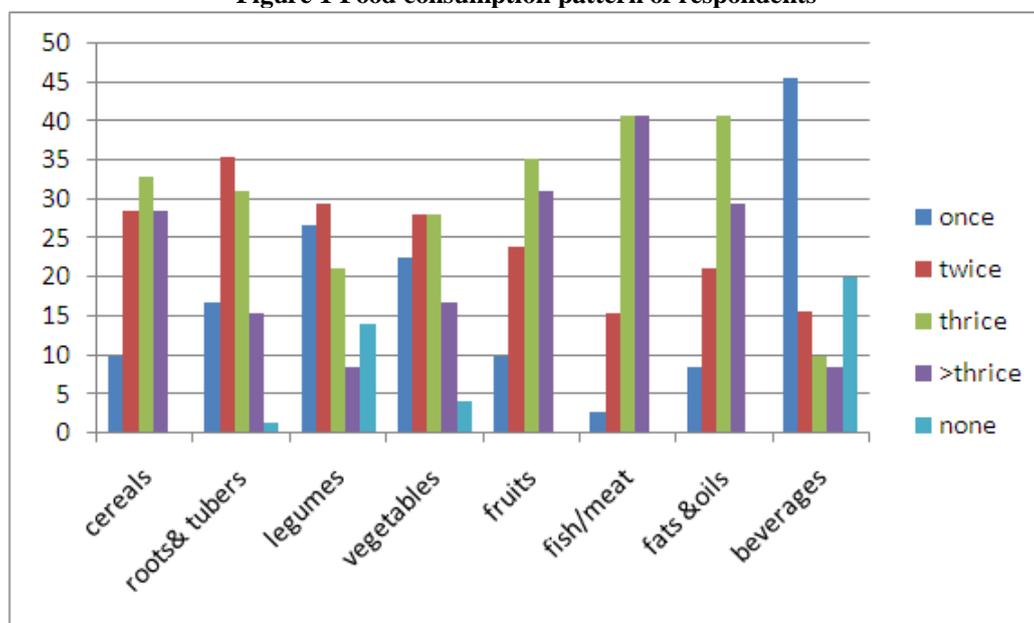
Table 2 Shows the nutrient intake of the respondents attending traditional birth homes. The caloric intake was 85% of RDA, while Calcium, Iron, vitamins A, E, C and folate intake were respectively 28%, 47%, 25%, 9% 31% and 44%.

Table 2 Respondents nutrient intake

NUTRIENTS	INTAKE	%RDA
Energy(kcal)	1739.4	85
Protein (g)	61.0	101
Fat (g)	25.7	37
Carbohydrate (g)	282.7	97
Vitamin. A (µg)	272.3	25
Vitamin. E (mg)	1.2	9
Vitamin .B1 (mg)	0.8	64
Vitamin. B2 (mg)	0.6	41
Vitamin .B6(mg)	1.0	51
Total folic acid(µg)	262.7	44
Vitamin. C (mg)	34.1	31
Calcium (mg)	278.2	28
Iron (mg)	14.1	47
Zinc (mg)	8.4	84

Figure 1 shows the food consumption pattern of the respondents, cereals, roots and tuber were the most consumed food among them

Figure 1 Food consumption pattern of respondents



IV. Discussion

The importance of optimal nutrition in pregnancy state cannot be over emphasized because this has direct effect on pregnancy outcome and future growth and development of children. In particular, previous studies have identified maternal nutritional status as key determinants of child malnutrition (3, 5, 6).

The nutrient intakes of the respondent were found to be grossly inadequate especially in micronutrient. This agrees with the findings of Maxiya-Dixon *et al* (2004)(6) that the prevalence of Vitamin A deficiency was still quite alarming among mothers, “those at risk of vitamin A deficiency were 13% among pregnant women,

19.2% were at risk of vitamin A deficiency nationally". The implication of this is that maternal health status will be compromise so will be that of the unborn child. Ogunyemi (2010) (7)said that 60% of maternal deaths in Nigeria are attributed to poor nutritional status of the mother. Poor maternal nutrition pregnancy, particularly during the third trimester is a major cause of low birth weight in the developing countries (8). This shortfall can be attributed to the fact that the traditional birth attendants were not trained health professionals and as such do not have adequate skill to be able to give evidenced based nutrition counselling. This is in agreement with Oomen *et al* (2009) (9) who found that mothers were mothers' knowledge on safe practices and nutrition during pregnancy and lactation is enhanced by reinforcement by health professional. The mean dietary folate intake was 44% of RDA and its bioavailability cannot be ascertained. Therefore, pregnant women are expected to take folic acid supplement to be able to meet the RDA during pregnancy. Available evidence suggests that synthetic folic acid (found in supplements and fortified foods) is more effective at preventing neural tube defects than is food folate (16). This gross inadequacy in micronutrients can be remediated by the use micronutrient supplements and these are available in accredited health care facilities.

V. Conclusion And Recommendation

The study showed inadequate nutrient intake among the pregnant women and this can be detrimental to their health and pregnancy outcome because malnutrition ranked as the major cause of maternal mortality and it is a major determinant of a successful pregnancy and a healthy well nourished baby. Therefore, nutrition education and adherence to vitamin supplements as prescribed by the doctor should be encouraged among pregnant women.

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