

Awareness about the Importance of Nutrition During Pregnancy Among Women in Child Bearing Age: A Quantitative Study Among Urban Women.

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Abstract

Introduction

An adequate nutrition pattern is of major importance for one's health and well-being, especially during pregnancy when a woman undergoes major biological, physical, psychological and social transformations. Macronutrient and micronutrient deficiencies predispose the fetus to preterm birth, neural tube defects, and low birth weight for gestational age. This study was conducted to determine the nutrition awareness of women in childbearing age in order to provide a greater understanding of the life course perspective (LCP) in relation to nutrition behaviors and pregnancy.

Methods

A cross-sectional study was conducted on based on our conceptualization of nutrition awareness and questionnaire based studies of a face-to-face interview. The participants were women with age group of 17 years to 45 years participate in studies in Jeddah city. Data collection procedures A Semi-structured questionnaires prepared in English language were translated in to Arabic and then translated back to English to check for consistency. The questionnaires were pretested Human ethical committee; the questions assessed respondents' nutrition knowledge.

Results and Discussion

Different questions were asked to 175 selected pregnant women to be included in this study assess knowledge of pregnant mothers on nutrition and determinant factors in the study area. Most of the respondents (34.85.2%) were in 19-25 years of age group.69.1 % (n=121) women says they pay attention to the number of soft drinks they drink each day. There would be fascinating to study awareness of specific nutrients and related issues, like consumption folic acid, non-vegetarian diet, minerals and life style such as mental stress and physical exercise.

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Citation: Kayamkani Abedulla Khan, Maaly Salem, Rawan Mohammed, Raghad Ahmad, Ola Abdulkarim et al. (2020) Awareness about the Importance of Nutrition During Pregnancy Among Women in Child Bearing Age: A Quantitative Study Among Urban Women.. Journal of Advanced Pharmaceutical Science And Technology - 2(3):1-10. <https://doi.org/10.14302/issn.2328-0182.japst-20-3472>

Keywords: Importance of nutrition, Pregnancy, diet among women, child bearing age food habits and women awareness about diet.

Received: Jul 16, 2020

Accepted: Jul 23, 2020

Published: Jul 28, 2020

Editor: Ghada Soliman, Department of Biochemistry, National Nutrition Institute, 16 Kasr El Aini Street, Cairo, Egypt.

Introduction

An adequate nutrition pattern is major importance for one's health and well-being, especially during pregnancy when a woman undergoes major biological, physical, psychological and social transformations. [1-2]

Deficiency of micro and macronutrient predispose the fetus to neural tube defects, preterm birth, and low birth weight for gestational age.[3] Among women of lower socioeconomic status (SES) Premature births and low birth weight for gestational age are very more prevalent.[4] Moreover, poor diet quality during pregnancy is mostly relate with the class of lower education,[5] a poor pre-pregnancy weight status and lower awareness about nutritional recommendations during pregnancy with lower SES all these conditions are more prevalent among pregnant women.[6]

Poor eating habits and overall diet quality stress and depressive symptoms are important negative predictors.[7, 8] In pregnancy outcome, many maternal and fetal complications maternal nutrition plays a crucial role.

Pregnancy is a very important period. It is a time to think about the lifestyle, habits, diet and how they affect and future child. It is a time to consider if women wish to adopt healthy habits that will be beneficial to pregnancy and baby both now and in the future.

When women are expecting a baby or breast feeding a baby, nutritious food is very important for pregnancy and lactation place extra demands on body. To meet these demands women need to think about what is best to eat and drink. Good nutrition in pregnancy

helps to stay healthy and energetic and to prepare to taking care the newborn and the rest of the family.

Nutrient like folic acid is extremely important during pregnancy, especially in the early period of pregnancy and even before conception and it is very important nutrient to avoid neural tube defect in fetus during pregnancy.[9-12]

Pregnant women need iron to form the red blood cells and also need for fetus. It helps to carry oxygen from the lungs to the tissues. Fortunately the ability to absorb iron increases during pregnancy and also in breast feeding.[13-15]

The best sources of iron are lean meats, especially liver and kidney. To absorb more iron from vegetables (especially beans and peas).Rich vitamin C foods or acidic foods (e.g. fruits, juice, bell peppers, tomatoes, kefir, and fermented foods) enhance iron absorption. Tea and coffee reduce the ability to absorb iron, so it is advised to drink them between meals rather than when eating iron rich foods.

Calcium is important for the healthy bones and teeth in both pregnant women and fetus. The best sources of calcium are milk, dairy products and some cereals. It is better for the women to spend more time outdoor, especially in sunny weather helps to produce vitamin D in the skin when exposed to sunlight. Vitamin D is also found in foods, such as oily fish, eggs, butter, and fortified margarine. [16-18] Drinking plenty water around 6 to 8 glasses a day. Women who are breast feeding should drink the amount needed to satisfy their thirst. Substances harm fetus are like alcohol, Smoking, Caffeine and many medications can adversely affect your baby are contra indicated for pregnant women or

women who are breast feeding. The main food-related problems during pregnancy are morning sickness, constipation and heart burn.

Methods

A cross-sectional investigation was carried out to find out the knowledge of women regarding maternal food diet and factors related to the pregnancy which used both qualitative and quantitative information collection procedure during February – April, 2018. Study population was sampled in child bearing age women.

Data collection procedures were done with semi-structured questionnaires in English language which were translated in to Arabic. To check the consistency further translated back to English. The questionnaires were pre-tested by Human ethical committee. The questionnaire was then assessed for its completeness, clarity and length. Research methodology is a questionnaire based studies an approximately 175 patients were included in this study.

In order to give a more clear understanding of the life course perspective in relation to nutrition behaviors and pregnancy nutrition awareness of women in childbearing age before and during pregnancy determined. Criteria for inclusion of participants: The women with age group of 17 to 45 years and willing to participate in studies were included in this study.

Criteria for exclusion of participants: the women unwilling to participate in the study, women below 16 years and above 45 years of age were excluded from the study.

The Various Questions were used to Determine the Respondents' Knowledge.

A very well balanced diet, Importance of proper food or nutrition during pregnancy, the pregnant food diet varies than other diet, sources of iodine, carbohydrate, protein, iron and vitamin A, negative consequences of malnutrition for the baby and mother, pregnancy accordingly, respondents were permitted to opt correct answers by indicating whether a given statement was yes or no. Based on the nutrition knowledge variables, respondent's knowledge on nutrition were calculated and computed.

The data were properly checked and done the descriptive analysis such as frequency, proportions and percentages were applied.

This study was approved ethically and permission obtained by the Ibn Sina National College Research Center and Human Ethical Review Committee (IHEC Ref No.: H-02-15032018).

Results

Different questions were asked to 175 selected pregnant women to be included in this study assess knowledge of pregnant mothers on nutrition and determinant factors in the study area. Most of the respondents (34.85.2%) were in 19-25 years of age group. Regarding the language preferred the respondents about greater were Arabic as mentioned Table 1 above. Almost 71.42% of the respondents were college educated. The majority (65.14%) were concerned occupation house wives as described in Table 1 above.

Most respondents of age ranges from 17-45 years were married. Most respondents were married. Awareness about the importance of nutrition during pregnancy among women in child bearing age. In this quantitative focus group discussion data analysis study 98.3% (n=172) participants are preferred Arabic language and 1.7% (n=3) respondents choose English questionnaires.

The age group of 19- 25 years are the maximum participants 34.85 % (n=61), followed by 36-45 years 32.57% (n=57), 26 – 35 years are 28.57% (n=50) and 12-18 years are 4% (n=7) shown in Table 2.

The majority of the respondents 65.14 % (n=114) are not working and only 34.85 % (n=61) participants are working. The majority of the participants are college educated 71.42 % (n=125), 21.14% (n=37) are high school educated, 5.71 % (n=10) are educated up to intermediate and 1.7% (n=3) are other educated levels.

Maximum of 80.6% (n=141) are agreed that they need to eat healthy food every day, 17.1% (n=30) women said they need to take healthy food occasionally , 1.71% said rarely and 0.57% said no need to eat healthy food. 54.85 % (n=96) women said that they

Table 1. Demographic characteristics.	
AGE	Number of Respondents
12 – 18 years	7 (4 %)
19 – 25 years	61 (34.85 %)
26 – 35 years	50 (28.57 %)
36 - 45 years	57 (32.57 %)
Education	
College	125(71.42 %)
Intermediate	10 (5.7%)
High School	37(21.14%)
Other	3 (1.7%)
Language preferred	
English	1.7 % (3)
Arabic	98.3% (n=172)
Working	
Yes	34.85 %(n=61)
No	65.14% (n=114)

have to take healthy food occasionally and 16% (n=28) replied that they have to take healthy food and Majority of women (46.3%) said no to pay attention to whether or not I eat healthy food and 28.6% say occasionally show attention. 80% (n=140) women says yes they need to eat vegetables every day and 12% (n=21) says can be eaten occasionally, 36.6 % (n=64) women occasionally think that whether or not I eat enough vegetables shown in Table 2. 40.6% (n=71) women say they often think about whether they had enough fruits and 38% (n=66) women occasionally thinks.

42.2% (n=74) women replied that they do not need to eat bread every day during pregnancy shown in Table 2.

51.4% (n= 90) women said need to consume dairy products every day and 24.6% (n=43) women said need to consume dairy products occasion. 41.9 % (n=73) women says they often think about my calorie intake. 36.5% (n=64) women responds that they rarely pay attention to how many calories they take in every day and 28.6% (n=50) reply that they will not pay attention. 74.9% (n=131) said they should limit the saturated fat that they eat daily and 13.1 % (n=23) answered that occasionally they can limit show as Table 2. Only 28 % (n=49) women agreed that they think

about the amount of saturated fat they take and 42.3% (n=74) women said that they will not think about saturated fat intake. 69.1 % (n=121) women says they pay attention to the number of soft drinks they drink each day. 84% (n=147) women say they need to take breakfast every day and only 8.6% (n=15) says they can take breakfast occasionally. 66.9% (n=117) women said they have to limit the soft drink consumption daily. 41.7% (n=73) women agreed that they experience constipation symptoms during pregnancy and 32 % (n=56) said did not experience constipation symptoms during pregnancy. 41.7% (n=73) women says they drinks enough amount of water during pregnancy and 25.7% (n=45) said they drink enough water occasionally during pregnancy figure-33. 33.1% (n=58) women replied that they drink 4 – 6 glass of water every day, 32.6% (n=57) women said they drink 2 -4 glass of water daily and 13.1% (n=23) said they drink less than 2 glass of water daily (Figure 1). 87 % of college qualified women and only 29 % of other or less than high school educated women aware about the nutritional importance (Figure 2). 78% of 26-35 years age group women were aware about the nutritional significance in pregnancy and 70 % of women of age group 19 - 25 years were aware about the importance nutrition in

Table 2. Questions asked to the participants.

Questions asked to the participants	Percentage/Number of participants			
	Rarely	Occasionally	Yes	No
Do i need to eat healthy food every day	1.7 (3)	17.1 (30)	80.6(141)	0.6(1)
Do i never think about whether or not I eat healthy food	6.9 (12)	54.9(96)	16(28)	22.3(39)
Do i rarely pay attention to whether or not I eat healthy food.	8(14)	28.6(50)	17.1(30)	46.3(81)
Do i need to eat vegetables every day.	2.3(4)	12(21)	80 (140)	5.7 (10)
Do i often think about whether or not I eat enough fruit	5.7(10)	37.7(66)	40.6(71)	15.4 (27)
Do i do not need to eat bread every day	5.1(9)	18.3(32)	42.3 (74)	33.7 (59)
Do i often think about how much bread I eat	4.6(8)	21.1(37)	44.6 (78)	29.1 (51)
Do i rarely pay attention to whether or not to eat enough bread every day	8(14)	22.9(40)	34.3 (60)	34.3 (60)
Do i need to consume dairy products every day	2.3(4)	24.6(43)	51.4 (90)	21.1(37)
Do i often think about the amount of dairy I consume	6.3(11)	22.3(39)	34.3 (60)	36.6 (64)
Do i rarely pay attention to the amount of dairy I consume daily	7.4(13)	21.1(37)	35.4 (62)	35.4 (62)
Do i need to control myself to adhere to a strict daily calorie intake	6.3(11)	19.4(34)	54.9 (96)	18.9 (33)
Do i often think about my calorie intake	6.3(11)	22.9(40)	41.7 (73)	28.6 (50)
Do i rarely pay attention to how many calories I take in every day	9.1(16)	25.1(44)	36.6 (64)	28.6 (50)
Do i should limit the saturated fat that I eat daily	2.3(4)	13.1(23)	74.9 (131)	9.1 (16)
Do i think about the amount of saturated fat I take in	6.9(12)	22.3(39)	28 (49)	42.3 (74)
Do i always limit the saturated fat that I take in	5.7(10)	30.3(53)	33.1 (58)	30.3 (53)
Do i need to limit how many soft drinks I consume daily	4.6(8)	12.6(22)	66.9 (117)	15.4 (27)
Do i never think about how many soft drinks I consume daily	6.9(12)	14.3(25)	17.1 (30)	61.1 (107)
Do i pay attention to the number of soft drinks I drink each day	1.1(2)	12.6(22)	69.1 (121)	16.6(29)
Do i need to eat breakfast every day	1.7(3)	8.6(15)	84 (147)	5.1(9)
Do i never think about eating breakfast	8(14)	21.1(37)	12.6 (22)	57.7 (101)
Do i make sure that I eat breakfast every day	3.4(6)	17.7(31)	62.3 (109)	16(28)
Do you experience any constipation symptoms during pregnancy?	5.7(10)	16.6(29)	41.7(73)	32(56)
Do you drink enough amount of water during pregnancy?	3.4(6)	25.7(45)	41.7 (73)	25.7(45)

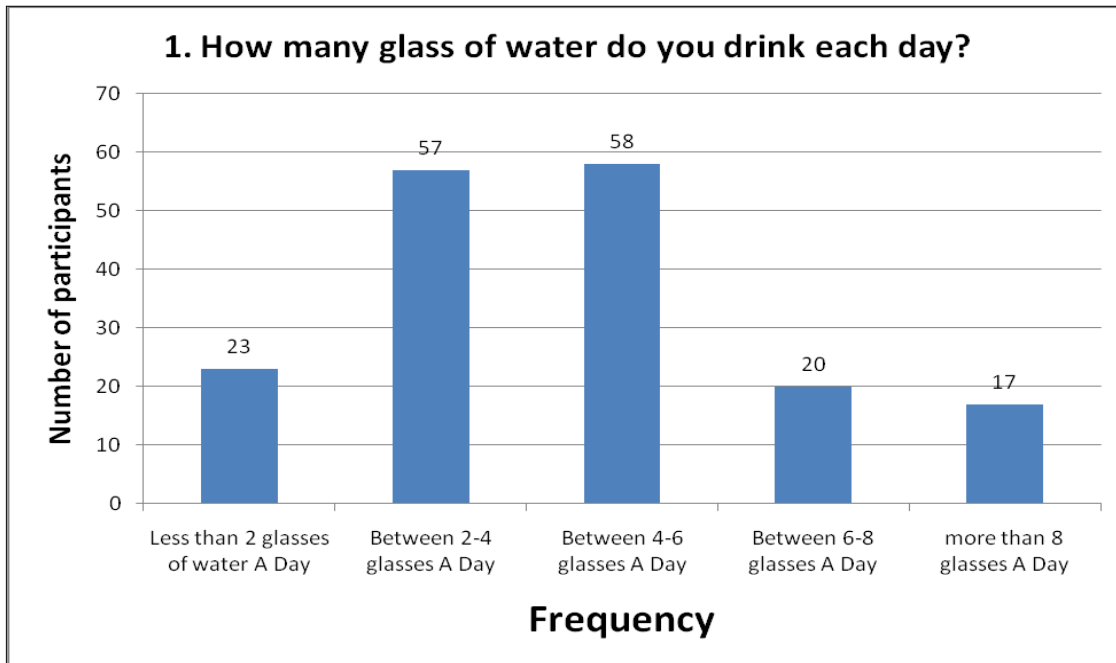


Figure 1. The number of glass of water consumed by participants per day.

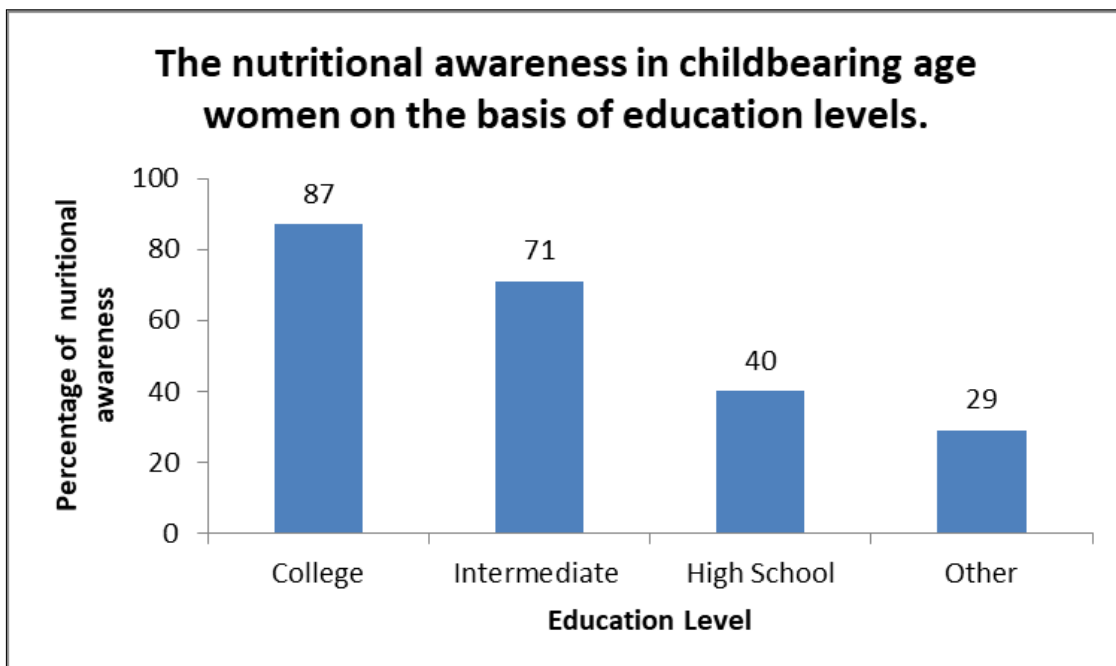


Figure 2. Nutritional awareness on the basis of education in women

pregnancy (Figure 3). 88 % of working women were aware about the importance of nutrition in childbearing age and 51 % of nonworking women were aware about the nutritional importance (Figure 4). 82 % of pregnant women participants were had overall awareness about the nutritional significance during pregnancy (Figure 5).

Discussion

This study was conducted to find out the nutritional awareness during pregnancy among women in child bearing age. Knowledge about the nutrition and its understanding is called as nutritional awareness.[19,20] It is mainly involved with the correct calculation of the one's own diet intake as compared to the recommended diet intake. But the community knows less or more about the healthy nutrition's. Whereas the understanding about the nutrition is not really impose in the practice. [22,23] This study mainly formulate an awareness as vital element of effort in prolific in achieving the greater understanding of attitude modification in association to health.

This divulge important of the related nutritional knowledge benefit in the women during preconception and pregnancy. The main goal of this study was to examine the nutritional awareness of women prior and during the pregnancy in their childbearing age. This

study revealed that the pregnant women have more awareness about the importance of nutrition during pregnancy as compared to other women. Majority of the women were conscious about the importance of dairy products, vegetables and fruits during pregnancy but they were lack of exact information related to the proper diet and its influence during pregnancy. Few participants were absence of minimum knowledge about the nutritional requirement during pregnancy and its impact on the fetus growth.

As the education qualifications increases in the women the awareness about the nutrition showed increased. The majority of the college graduated women were more aware about the significance of nutrition. The age group of 26 - 35 years women shown more awareness about the nutritional importance in childbearing age. Majority of the working women were aware about the importance of nutrition in childbearing age.

The health care professionals should conduct the awareness programs on the nutritional importance during pregnancy and educate the childbearing age women by promotions or by conducting the community services. So that will provoke the women to become more nutritionally aware.

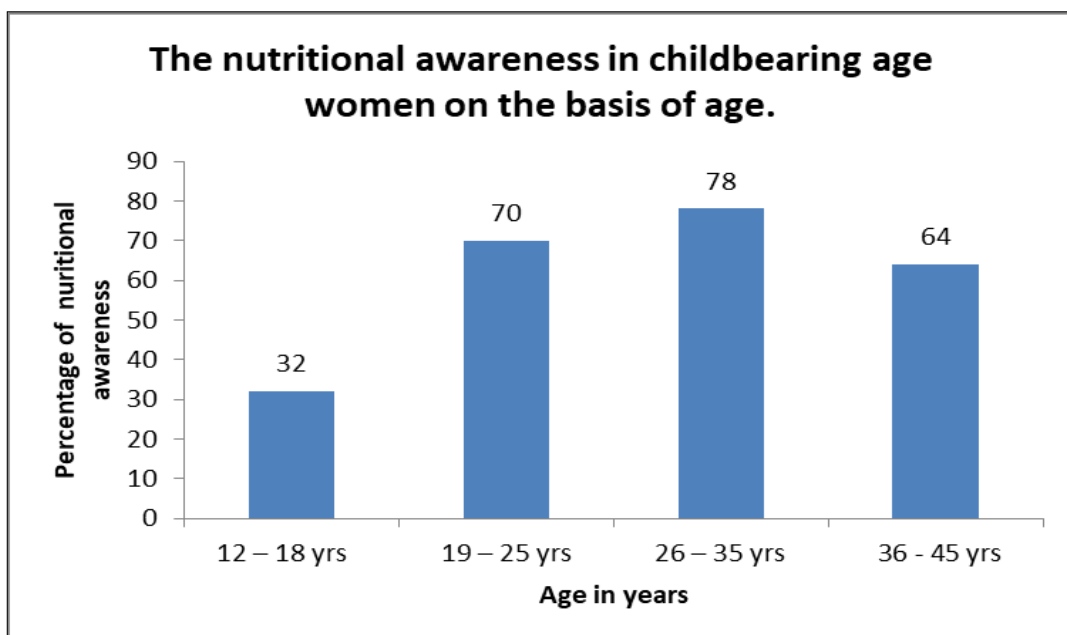


Figure 3. Nutritional awareness on the basis of age in women

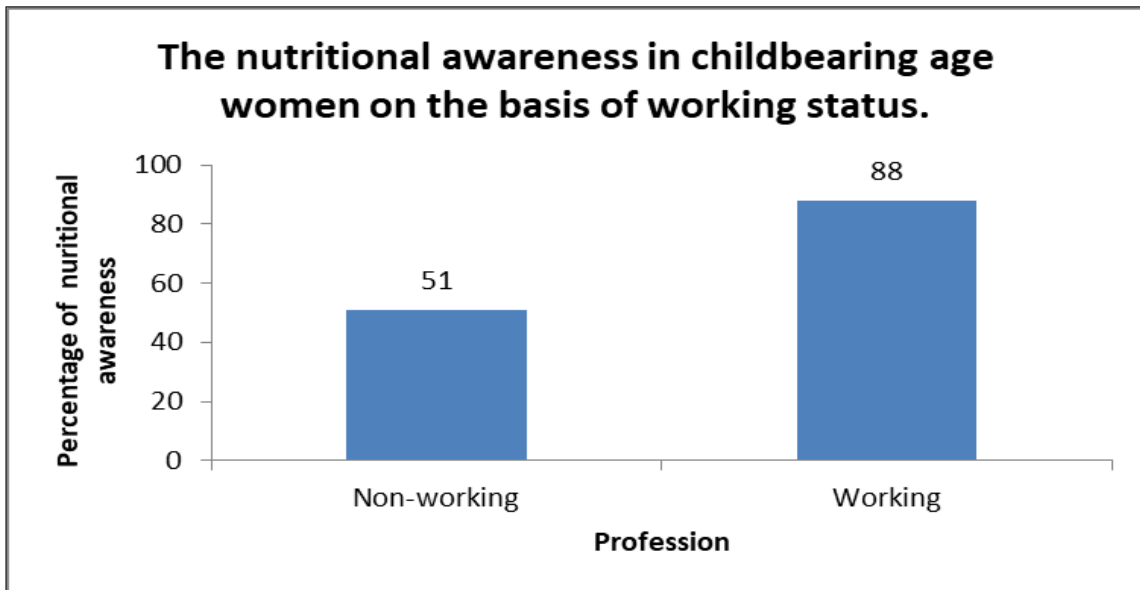


Figure 4. Nutritional awareness on the basis of working status in women

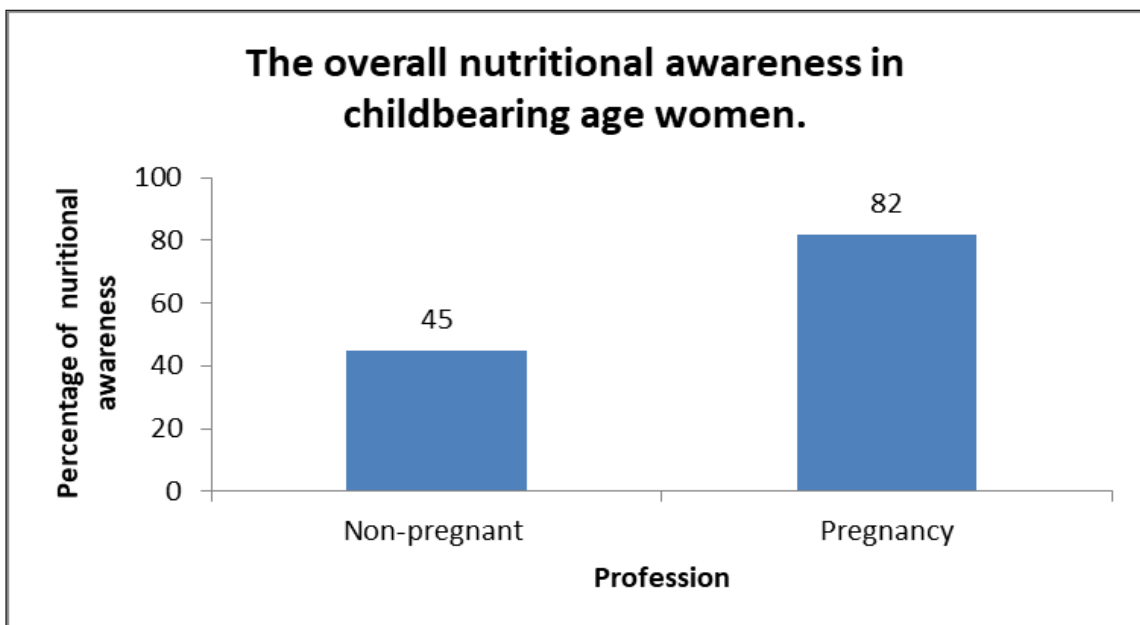


Figure 5. Overall nutritional awareness in women.

Conclusion

The several observations of the subjects over a period of a time is required to find out the difference in nutritional awareness shown in this study dominance to practical or clinical effects. There would be fascinating to study awareness of specific nutrients and related issues, like consumption folic acid, non-vegetarian diet, minerals and life style such as mental stress and physical exercise. Quantification of awareness about the nutrition in various stages of life such as adolescence, retirement, special conditions or critical stages undergoing in the life aspiring in the contribution of the life course perspective on diet to take decisions and to organizing relevant information and defining alternatives. The physicians can utilize these results to customize the education on nutrition to women in childbearing age to prevent the long term consequence from suboptimal nutrition especially during pregnancy or shortly after childbirth.

Acknowledgement

We would like to acknowledge Ibn Sina National College, Jeddah, Kingdom of Saudi Arabia, for their constant support.

Conflict of Interest

No conflict of interest.

Contribution of Authors

All authors have made substantial contribution to the work and approved it for publication.

Funding

None

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