

Assessment of Health-Related Behaviors of Pregnant Women At Port Said City

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ABSTRACT

Background: Pregnant women can improve their health condition, achieve adequate pregnancy outcomes, and enhance the quality of life for both moms and children by adopting healthy activities. It is also important to recognize that some health behaviors may change as a result of pregnancy and without intervention from health professionals.

Aimed: to assess health-related behaviors of pregnant women about practice regarding appropriate healthier behavior. **Subject and Method:** **Design:** a descriptive study

Setting: The study was carried out in seven governmental maternal and child centers in port said city. **Subjects:** A convenience sample of 200 women aged between 20 to 35 years at Port Said city from July to December 2020. **Tools:** two tools were used for data collection consisting of a structured interview schedule and a health practice scale.

Results: demonstrated that the majority of the samples had lower levels of nutrition, medication use, and psychiatric domains. Additionally, more than two-fifths had median a degree of personal care. It also revealed that half of the studied sample had a satisfactory level of knowledge regarding health behaviors, while the remaining samples had an inadequate level of knowledge. **Conclusion:** Research shows that more than three-quarters of the sample examined had low levels of health behaviors. **Recommendations:** Prenatal classes on health-related behaviors for all pregnant women. Accurate and relevant information on health-related behaviors should be disseminated to pregnant women.

Keywords: Health, behavior, Pregnant women

INTRODUCTION

Health behaviors are actions people take that have an impact on their health. These behaviors could be either good or damaging to the actor's or other people's health, and they could be purposeful or accidental. Smoking, drug usage, nutrition, physical activity, and sleep are just a few of the habits that fall under the category of healthy behaviors (Short & Moll born, 2015).

Pregnancy is a unique phase when women may feel more motivated to improve their diets and physical activity levels and/or experience new barriers to changing behaviors, but there is limited understanding of factors that influence diet and physical activity in pregnancy (Wilkinson & McIntyre 2012).

Being pregnant is a special occurrence that causes changes in all facets of one's physical, psychological, and social existence. It is best to make healthy behavioral modifications throughout pregnancy. (Kazemi , Hajian, Ebrahimi-Mameghani, & Khob , 2018).

Pregnancy-related and long-term health outcomes for mother and child are linked to healthy behaviors during pregnancy. Several negative outcomes, such as an increased chance of cesarean delivery, low birth weight, inappropriate preterm birth, and chronic disease in adulthood, are linked to poor food, insufficient physical activity, and perceptions of weight gain objectives during pregnancy (Wilkinson & McIntyre, 2012)

According to. Kazemi et.al (2018). finding a means to experience pregnancy and childbirth safely is pregnant women's top concern. After all, a pregnant woman's performance, choices, actions, and behaviors concerning her health and lifestyle can impact not only her health but also the growth and development of the fetus. They may potentially have long-lasting impacts on women and their unborn children.

To maintain good health and lessen the severity of illness, especially for those who are aware of problems during pregnancy, which is a very small percentage of people, nurses today play a crucial role in promoting health by identifying problems during pregnancy and providing high-quality prenatal care. (Gamel, Fathy, El-Nemer, &Abou Shabana, 2017)

and understanding of factors impacting maternal health behaviors, such as interpersonal interactions between medical teams, geographic factors, cultural factors, social factors, socioeconomic issues, and physical factors. The most crucial element is under your control (Egbuniwe Michel., Egboka & Nwankwo Ukamaka, 2016).

Significance of the study:

collating information on health behaviors including their prevalence, determinants, clustering (i.e. co-occurrence of particular behaviors), risk and benefits to mother and baby, and timing, may help to prioritize behaviors – both from a policy perspective and in supporting women to make informed choices. There is an urgent need for future research to address priority settings for health behavior change before, during, and after pregnancy. Critical too is the need to better understand context, as the (perceived) relevance of health behaviors will vary with women’s individual obstetric and medical history, and their wider circumstances, consistent with the personalization agenda voiced in Better Births Olander, Smith and Darwin (2018).

In-depth data on pregnant women's health behaviors in maternity facilities was the goal of this study. This study benefits not just the mother and her unborn child but also the family, the neighborhoods, policymakers, and medical professionals Egbuniwe et al. (2016).

This is due to the lack of research into the health behaviors of expectant mothers visiting maternity hospitals and health centers, especially in Port Said city. The project would start collecting specific data on pregnant women's health behaviors in Port Said.

AIM OF THE STUDY:

The aim of this study was to assess the health-related behaviors of pregnant women in Port Said city.

Specific Objective of the study:

-Evaluate women's health practice regarding appropriate healthier behavior during pregnancy

-Determine factors influencing the health behavior of a pregnant woman in port said city.

Research Question:

What is the practice of pregnant women regarding health-related behavior?

SUBJECT AND METHOD:**(I) Technical design:**

Research Design: Descriptive design was utilized in this study.

Study Setting: The study was carried out at a primary medical center and units representing the four districts of the city of Port Said, which were randomly selected based on geographic distribution before the implementation of the comprehensive health insurance system, to ensure the generalizability of the findings in the city of Port Said. The following are mentioned: (El Manakh1, El Manakh2, El Arab1, El Arab2, El Kuwait, El Gwhara , Osman Ebn Afan, Omar Ebn Elkhatab, Osman Ebn Afan, Misara, 500 units, Mostafa Kamel, El Kabouty Center, Bank Elescan, Fatma Elzahraa).

Subjects: Purposive sample of 200 pregnant women who attended the previously mentioned setting and fulfilled the inclusion criteria were enrolled in this study during the study period (6 months).

Inclusion criteria: included all Null Para women who are between the ages of 20 and 35 have a gestational age between 12 and 32 weeks and are free from any chronic health problems such as renal disease, heart disease, and medical problems e.g. pre-eclampsia, D.M

Sample size: By using a statistical equation

Steve Thompson formula was utilized to calculate the sample size, at 5% α error (95.0% significance) and 20.0 β error (80.0% power of the study) Janet and Phil (2020).

$$N \times P (1-P)$$

$$n = \frac{N \times P (1-P)}{(N-1) \times (d^2 / Z^2) + P (1-P)}$$

n=Sample size

N=Total society size (417 women)

Z= The corresponding standard class of significance 95 d=error percentage = (0.05) = 1.96

P=percentage of availability of the character and objectivity= (0.1)

d =error percentage = 0.05

The sample size was calculated to be 200 women.

Tools for data collection:

The data was collected through the following tool:

Tool 1: Structured interview:

The tool would be developed by the researcher which contained the following parts:

Part 1: Personal data such as age, level of education, occupation status, marital status, telephone number, and family income.

Part 2: obstetric history Included questions related to the history of menstruation, number of previous abortions, number of previous pregnancies, and gestational age

Tool 2: Health behaviors practice:

The schedule, which was developed by researchers in English and translated into Arabic, would be adapted from Wardle. & Steptoe, (1997), Smadi & Alsmadi, (2011), and Hildt & Pawowska, (2020), and evaluating the effectiveness and accessibility It comprises four domains, body care domain, Mental and psychological domain, nutrition domain, and medication use to measure pregnant women health practice e.g. eating meals contain all nutritional elements, maintaining the ideal weight gain, using the prescribed medications as needed and orienting and accepting my feelings.

Scoring system:**For items of health behavior:**

Scores would be from strongly agree = (5), agree=4, =neutral 3, disagree= 2 and strongly disagree = 1. it contains 37 items. The score range of 5.5 to 7 .0.

domain 1: general health contains (12) questions, classified into low<6.6, medium range from <6.6-8.4, and high>8.4. Domain 2: body care contain (8) question, classified into low <4.9, medium 4.9-6.3nd high >6.3. domain 3: drugs contain (8) questions and are classified into low <4.9, medium from 4.9-6.3, and high >6.3. domain 4: which contain (9) question and is classified into low <5.5, medium from 5.5-7, and high >7.

tool 2: knowledge of the pregnant woman about appropriate healthier behaviors during pregnancy:

Among the topics covered are risks associated with pregnancy, proper physical habits, proper nutrition, proper eating habits, types of foods consumed, preventive behaviors- health policies, and access to information about health and disease.

Scoring system:

It consists of 36 questions, which were interpreted into 3 categories; completely correct answer (score2), partially correct answer (score1) incorrect answer (score 0). All item was summed, the highest score was 72, and the lowest score was 0, more than and equal to 60% indicated a satisfactory level of knowledge, while less than 60% indicated an unsatisfactory level of knowledge.

(II) Operational design: -**Preparatory phase**

It offers a review of the literature, diverse studies, and theoretical information on various research topics from books, articles, online journals, and publications like PubMed, El Sevier, and the American Diabetes Association.

Pilot Study:

A pilot Study would carried out on 10% (20) of the studied women that was included in total sample . The pilot study aimed to evaluate the feasibility of the research tool, the time needed to complete each tool, and the effectiveness of the content. Adaptations that were required were made in light of the pilot study's findings. The study tools were improved, modified, and rewritten in light of the findings and the approval of the final version.

Tools validity:

A jury of nine professionals from the field of obstetrical nursing and medicine evaluated the content validity of the instruments. They were requested to comment on the tools created. Based on the jury's feedback and recommendations, the tool was changed. Rephrased statements and new translations of certain terms. This phase took place over six weeks.

Reliability:

Cronbach's alpha coefficient, which measures the development tool's internal consistency, is used to determine a tool's reliability; the Cronbach alpha coefficient test result is (0.799), as shown in the following table.

Tool	Cronbach's Alpha
Attitude	.779
Knowledge	.803
Practice	.814
Total tool	.799

Field of work:

- Researchers employed pre-established methods to gather information from pregnant Nulli Para women in the aforementioned setting. Data collection began in March 2020 and lasted for six months, ending in January 2021. According to a schedule of immunization days, the researchers went to the antinatal clinic three days a week from 9:00 am to 12:00 pm. Face-to-face interviewing methods, which are individual-based and done in a private part of the center to ensure confidentiality and privacy, were used to collect the data. The researchers asked the pregnant women to engage in an interview after outlining the study's objectives. Each woman was questioned about knowledge and practice about health behavior during pregnancy after agreeing to participate. Average time for the completion of interviewing questionnaire was about 30 minutes. A number of interviewed women / day ranged from 2-3 women. The questionnaire is filled by the researcher while she waits for the women who have had their vaccinated. After completion, the researcher ensures that all statements included in the tools were completed.
- Statistical Design:** Following the completion of data collection, the gathered data were coded, sorted, tabulated, and analyzed using the SPSS program following each data type. To depict qualitative data, utilize numbers and percentages. Mean and standard deviation are used to describe quantitative data. To compare qualitative variables, the chi-square test was employed. A significant level value is one with a p-value of 0.05, a highly significant level value is one with a p-value of 0.001, and a non-significant result is one with a p-value > 0.05.

RESULTS

Table (1): Clarify the personal information of expectant mothers. Their average age was determined to be (22.98 3.65), and the age range with the biggest percentage (75.5%) was between 20 and 24. More than half of the population (54.0%) has completed secondary

education, but the percentages of illiteracy and literacy are low (6.0% and 4.0%, respectively). The majority of them (74.5%) were likewise discovered to be housewives. Additionally, data revealed that more than half of the husbands (56.5%) had a secondary education, while only 6.0% of them could read and write. Additionally, it was noted that the whole study population was employed, with the bulk of them working privately (88.0%). Additionally, it was discovered that 64.5% of them lived in rural areas. Concerning the crowding index, it was found that, respectively, 48.0%, 42.0%, and 10.0% of people lived in crowded, under-crowded, and overcrowded homes. In terms of income, slightly more than two-thirds of them (69.0%) had sufficient money.

Table (2): It was stated that the average marriage lasted (17.75 ± 20.37) months. The median pregnancy was a primi gravida, and the majority of them were primi paras. There were only 3.0% and 0.5% of unexplained and idiopathic miscarriages, respectively. The average gestational age of them was 20.43 ± 6.91 weeks, and more than half of them were in the second trimester. The majority of them began receiving prenatal treatment in private clinics during the first trimester of pregnancy. All of them were found to have had subpar prenatal care. In addition, a health professional was the source of knowledge for two-thirds of women, who then turned to family and friends for the remaining third.

Table (3): shows the study sample's average score for health behavior. The mean score for general health was (43.19) and the median was (43.0). The mean score for personal hygiene was 23.43, and the median was (23.0). A mean score of 30.47 and a median score of 31.0 were noted in the drug category. The mean and median values for psychosocial factors were 34.29 and, respectively (35.0). Additionally, the median of general health habits was and the estimated mean was (131.38). (132.0).

Figure (1): The results show that the examined samples crossed below the recommended range at gestation (12–19 weeks), 5% equaled the recommended value, and 3% exceeded the recommended value. A 5% reduction, a 10% reduction, and an increase of 1% are advised at gestation (20–27 weeks). At (28-32), 15% less than advised, 5% in line with advised levels, and 1.5% above advised levels. For the majority of the investigated samples, prenatal testing was poor.

Figure (2) demonstrates that the majority of the samples evaluated in private clinics were taken during the first trimester of pregnancy.

Table (4) shows the relationship between personal information and the sample's pregnant women's health practices. Age, male age, residence, and health behaviors did not have a statistically significant link. Contrarily, there were strong relationships between education level, occupation, income, and husband's education level and health behaviors; highly educated women, educated spouses, working women, and those with sufficient income scored highly on these behaviors.

Table (5): shows how the studied sample's pregnancy health practices and obstetric data are correlated. Pregnancy and health practices have no statistically significant association. The number of prenatal visits, gestational age, and health behaviors, on the other hand, all showed a statistically significant correlation (0.009 and 0.005, respectively).

Table (6): demonstrates the average values of the study sample's health behaviors. The mean score for general health was (43.19) and the median was (43.0). The mean score for personal hygiene was 23.43, and the median was (23.0). A mean score of 30.47 and a median score of 31.0 were noted in the drug category. The mean and median values for psychosocial factors were 34.29 and, respectively (35.0). Additionally, the median of general health habits was and the estimated mean was (131.38). (132.0).

Table (1): Frequency distribution of the studied women according to their data (n= 200).

Variables	No	%
Age group		
• 20- 24 years	151	75.5
• 25- 29 years	35	17.5
• 30-35 years	14	7.0
Mean / year	22.98±3.65	
Educational level		
• Illiterate	12	6.0
• Read and write	8	4.0
• Preparatory	17	8.5
• Secondary	108	54.0
• University	55	27.5
Occupation		
• Housewife	149	74.5
• Occupied	51	25.5
Work nature		
• Housewife	149	74.5
• Governmental	49	24.5
• Private	2	1.0
Husband Educational level		
• Illiterate	21	10.5
• Read and write	12	6.0
• Preparatory	9	4.5
• Secondary	113	56.5
• University	45	22.5
Husband Occupation		
Occupied	200	100.0
Work nature		
• Governmental	24	12.0
• Private	176	88.0
Residence		
• Rural	129	64.5
• Urban	71	35.5
Housing		
• Separate	72	36.0
• With husband's family	128	64.0
Crowding index		
• Under crowded	84	42
• Crowded	96	48
• Overcrowded	20	10
Income		
• Enough and exceed	23	11.5
• Enough	138	69.0
• Not enough	39	19.5

Table (2): Obstetrical history of the studied women (n= 200).

Items	No	%
Duration of marriage		
• < 6 months	24	12.0
• 6: <12 months	71	35.5
• 12: < 18 months	56	28.0
• 18: < 24 months	19	9.5
• ≥ 24 months	30	15.0
Duration of marriage (month)		
Mean ± SD	17.75 ± 20.37	
Gravidity		
• Primigravida	193	96.5
• 2	6	3.0
• 3	1	0.5
Median	1	
Min – Max	1 :3	
Nullipara	200	100.0
Abortion		
No abortion	193	96.5
1	6	3.0
2	1	0.5
Causes of abortion (n= 7)		
Don't know	6	85.7
Idiopathic	1	14.3
Gestational age		
• First trimester	21	10.5
• Second trimester	108	54
• Third trimester	71	35.5
• Mean ± SD	20.43 ± 6.91	
Start of ANC		
First trimester	176	88.0
Second trimester	24	12.0
Place of antenatal care		
Private clinic	123	61.5
ODP in hospital	77	38.5

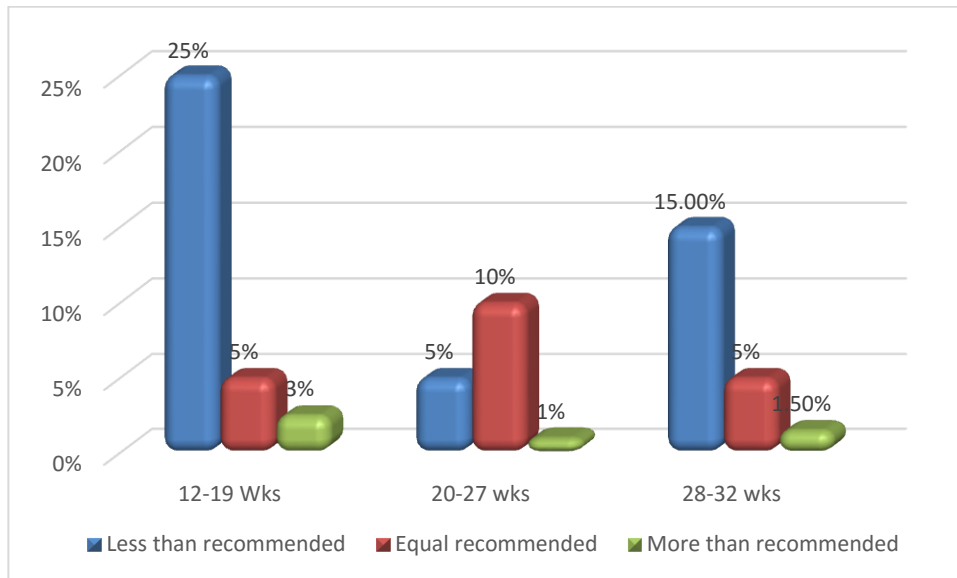


Figure (1): Antenatal care visits of Pregnant Women with Different Gestational Age

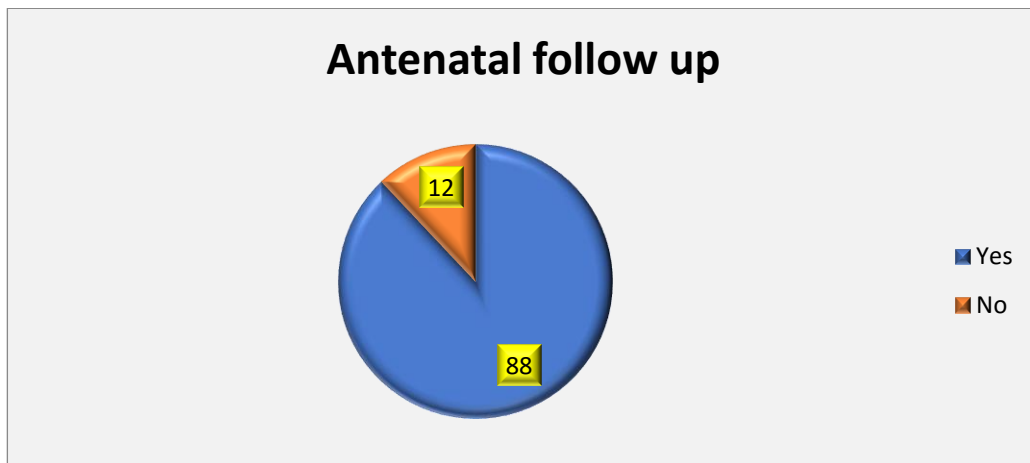


Figure 2: Antenatal follow-up of the studied sample

Table (3): Mean, SD, and median of the health behaviors among the studied women (as reported by pregnant women) (n= 200).

Items	Mean	SD	Median
Nutrition			
Eating chicken and fish more than red meat.	3.40	0.98	3.0
Eating daily breakfast.	3.77	1.30	4.0
Eating fresh vegetables and fruits daily.	3.39	1.01	3.0
Drinking enough water daily.	4.04	0.98	4.0
Eating meals contain all nutritional elements.	3.79	1.11	4.0
Consulting the physician when experiencing pain.	4.21	1.05	5.0
Sleeping eight hours per night and two hours per daytime.	3.46	1.16	4.0
Measuring the blood pressure regularly.	4.43	0.80	5.0
Avoiding crowded areas.	4.06	1.07	4.0
Avoiding crowded areas.	4.38	1.18	5.0
Performing annual check-ups.	2.51	1.56	2.0
Visiting the dentist regularly.	1.78	1.07	1.0
Total	43.19	5.62	43.0
Body Care			
Maintaining the ideal weight gain.	2.61	1.21	2.0
Eating an adequate amount of salt.	3.47	1.08	4.0
Limiting the use of white sugar.	3.31	1.35	3.0
Limiting the use of caffeine.	2.95	1.55	3.0
Eating low-fat foods.	3.95	1.13	4.0
Listening to health education programs on TV or the internet.	2.79	1.25	3.0
Practicing physical exercise as recommended by the physician.	1.74	0.95	1.0
Walking for 15-20 min daily.	2.64	1.30	3.0
Total	23.43	5.17	23.0

Table (3; Cont.): Mean, SD, and median of the health behaviors among the studied women as reported by pregnant women (n= 200).

Items	Mean	SD	Median
<u>Medication use</u>			
Using the prescribed medications as needed.	3.94	1.55	5.0
Avoiding smoking.	4.25	1.21	5.0
Taking over-the-counter medications.	1.99	1.42	1.0
Using hypnotic drugs.	3.88	1.57	5.0
Following the physician's instructions.	4.64	0.91	5.0
Avoiding the drugs prescribed by non-healthcare providers.	4.55	1.17	5.0
Reading the pamphlet of each drug.	2.88	1.45	3.0
Avoiding drug interactions.	4.36	1.13	5.0
Total	30.47	4.68	31.0
<u>Psycho-social</u>			
Getting family's support.	4.18	1.20	5.0
Getting husband's support.	4.12	1.11	5.0
Feeling fun.	4.14	0.94	4.0
Interested in my life?	3.36	1.01	3.0
Orienting and accepting my feelings.	3.88	1.02	4.0
Expressing my feelings.	3.18	1.39	3.0
Respecting others.	4.41	0.82	5.0
Listening to music daily.	2.94	1.48	3.0
Crying as needed.	4.10	1.16	5.0
Total	34.29	4.18	35.0
Overall health-behavior	131.38	13.97	132.0

Table (4): Relation between personal data and health behaviors practice during pregnancy among the studied women (n= 200).

Variables	Low		Medium		Significance	
	No	%	No	%	X ²	P-value
Age (years)						
• 20-	117	58.5	34	17	4.873	0.087
• 25-	30	15	5	2.5		
• 30-35	14	7	0	0		
Educational level					35.403	0.000**
• Illiterate	12	6	0	0		
• Read and write	5	2.5	3	1.5		
• Preparatory	5	2.5	12	6		
• Secondary	91	45.5	17	8.5		
• University	48	24	7	3.5		
Occupation					8.087	0.002*
• Housewife	113	56.5	36	18		
• Working	48	24	3	1.5		
Husband's age (years)					6.341	0.042*
• 23-	95	47.5	29	14.5		
• 29-	45	22.5	10	5		
• 35-40	21	10.5	0	0		
Husband's educational					30.842	0.000**
• Illiterate	8	4	13	6.5		
• Read and write	8	4	4	2		
• Preparatory	9	4.5	0	0		
• Secondary	97	48.5	16	8		
• University	39	19.5	6	3		
Residence					0.474	0.311
• Rural	102	51	27	13.5		
• Urban	59	29.5	12	6		
Income					7.509	0.023*
• More than enough	23	11.5	0	0		
• Enough	110	55	28	14		
• Not enough	28	14	11	5.5		

Table (5): Correlation between obstetrical data and practice of health behaviors during pregnancy among the studied sample (n= 200).

Variables	Health behaviors	
	R	p-value
Gravidity	0.135	0.06
Gestational age	0.184	0.009*
No. of antenatal visits	0.198	0.005*

DISCUSSION

Pregnancy is a unique event that causes changes in the various aspects of physiological, psychological, and social life. Pregnancy is an ideal time to implement health behavior

changes. Adherence to health behavior recommendations during pregnancy has been shown to improve pregnancy outcomes. The present study aimed to assess the knowledge, attitude, and practice of pregnant women; this aim was achieved through the findings of the current study.

The health behaviors of pregnant women were evaluated in this study using a sample of 200 of them. Moreover, half of the pregnant women (20–24 years old) and slightly fewer than three-quarters of housewives (20–24 years old) have a secondary education. The present study noted that none of them had children, and their average marriage lasted (17.75–20.37) months. They all had poor prenatal care as well. The researchers hypothesize that this may be because of urban residence, cost, and quality of services,

Shiferie, Berhane, and Workneh (2020) who conducted a qualitative study to evaluate healthcare-seeking behaviors among pregnant women in rural Amhara, Ethiopia, provide support for the current findings. Despite the relationship being good with health care providers; pregnant women were not utilizing women's health services following Ministry of Health standards. This indicates subpar prenatal care. According to the authors, there may be due to lack of transport access to healthcare facilities.

The current study findings are supported by Garg and Divya (2020) who conducted a descriptive study to assess the knowledge, attitude, and practice of antenatal care among pregnant women. The researchers stated that less than half of the studied pregnant women had poor practice toward the antenatal care.

On the other hand, Ma et al. (2020), carried out a study to define pregnant women's healthy behaviors in rural China and to determine which subgroups of women are more prone to engage in unhealthy activities during pregnancy. The majority of pregnant women received acceptable prenatal care, according to the authors. There may be a connection between this conflict and disparities in general traits and community makeup.

According to the study, pregnant women were more likely to engage in poorer general health, pharmaceutical, and psychological health behaviors than non-pregnant women. Additionally, the majority of them fall into the category of average personal care. The researchers hypothesize that this may be because the pregnant women investigated were nulliparous and had no prior experience with self-care and healthy pregnancy behaviors. They receive subpar prenatal care as well.

These findings are in line with those of Umar and Adel (2019), who carried out a descriptive study to evaluate pregnant women's health practices. He discovered that they had inadequate sleep, relaxation techniques, medicine, and medical care habits.

These findings are in agreement with Navaro, Vezzosi, Santagati, and Angelillo (2017), who conducted a cross-sectional survey to identify the knowledge, attitudes, and practice of pregnant women and to determine the variables associated with medicine use. They found that more than half of the women used medicines during pregnancy without a doctor's advice. The authors recommended that women should receive education about medication use during pregnancy to increase their knowledge and reduce self-medication.

Also, JanaKiraman, Gebreyesus, Yihunie, and Genet, (2021) conducted a study to evaluate the knowledge, attitude, and practice of antenatal exercises. They observed that 37.9% of pregnant women had good practice towards exercise during pregnancy. In a conclusion, they stated that the practice of antenatal exercise is low to global standards.

These findings are in disagreement with Boguszewski et al. (2018), who carried out a descriptive study to Evaluation of the Health-related Behavior of Pregnant Women from Warsaw, Poland. He discovered that Pregnant women showed higher levels of healthy behavior. according to the authors. They're due to crucial duties of medical professionals (doctors, midwives, physiotherapists

On the other hand, a pilot study was carried out by Pilewska et al. (2018) to evaluate the health behaviors of women who had multiple pregnancies. When compared to the general rates of women's health behaviors and indicator behaviors, the authors discovered that multiple pregnancies had the highest percentages of the highest levels of physical activity. These variations could be explained by variations in the participants' overall personalities.

These findings are not in line with those of Khleel and Mohammed (2021), who carried out a descriptive study to evaluate pregnant women's pregnancy-related health behaviors. The authors found that overall assessments of health behavior responses during pregnancy were fair health behavior levels.

This study revealed the relation between the sample's personal information and pregnancy-related health practices. The link between age, male age, residence, and health behaviors was not statistically significant. On the other side, there were strong relationships between education level, occupation, husband's education level, income, and health behaviors. Women with higher education, husbands with higher education, employed women, and those with sufficient income had higher health behaviors.

These findings are in line with those of Ma et al. (2020), whose goal was to systematically describe the healthy behaviors of pregnant women in rural China and determine which subgroups of women are more prone to participate in harmful activities during pregnancy. According to scientists, there is a strong link between maternal education and health behaviors.

The current findings contrast with research by Kazemi et al.(2018) that evaluated pregnant women's health-related activities. Researchers discover that a lack of time, particularly for multiparous women, and difficulty to communicate with nursing assistants can hinder healthy practices.

CONCLUSION

Based on study findings, it can be concluded that: more than three-quarters of the studied sample had low levels in all domains of health behaviors. a pregnant woman's health behavior is influenced by her education level, occupation, husband's education level, gestational age, and the frequency of antenatal checkups

RECOMMENDATION

Developing antenatal classes for all pregnant women about health-related behavior. The mass media should be utilized and community organizations mobilized to disseminate correct and relevant information about health-related behavior to pregnant, families, and communities. Further studies are needed. Further studies are needed to apply health education programs for women to enhance their knowledge, and practice, regarding health-related behavior.

REFERENCE

Boguszewski, D., Adamczyk, J. G., Tomaszewski, W., Salata, D., Skowera, E., Patalon, M., and Bialoszewski, D. (2018). Evaluation of the health-related behavior of pregnant women from Warsaw, Poland. *Iranian journal of public health*, 47(1), 57.

Egbuniwe M, C., Egboka, O. L., and Nwankwo U, C. (2016).health seeking behavior amongst pregnant women attending antenatal clinic in primary health care centres in rural communities of nnewi north lga anambra state. *Journal of Research in Nursing and Midwifery (JRNM)(ISSN: 2315-568)* , 5(1), 001-010.

Gamel W, Fathy M, El-Nemer A ,and Abou Shabana K (2017). Utilization of self-care brochure for relieving mother's minor discomforts during pregnancy. *Journal of Nursing and Women's Healthcare: JNWH-108* Retrieved from:10.29011/JNWH-108.100008.

Garg, P., & Divya. (2020). Knowledge, attitude and practice of antenatal care among pregnant women attending antenatal clinic in a tertiary care hospital of Mathura, Uttar Pradesh, India. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology*, 9(6), 2269-2273.

Hildt-Ciupińska, K., & Pawłowska-Cyprysiak, K. (2020). Positive health behaviors and their determinants among men active on the labor market in Poland. *American journal of men's health*, 14(1), 1557988319899236.

Huda A. Khleel1 & Widad K. Mohammed .(2021) . Evaluation of pregnancy-related health behaviors for pregnant women's attending abo ghareeb primary health care sector, iraq . *Annals of R.S.C.B., ISSN:1583-6258*, 25, (6) 7970 - 7977

JanaKiraman, B., Gebreyesus, T., Yihunie, M., & Genet, M.G. (2021). *Knowledge, attitude, and practice of antenatal exercises among pregnant women in Ethiopia: A cross-sectional study*. PLOS ONE. Retrieved from: <https://doi.org/10.1371/journal.pone.0247533>.

Janet L. Peacock and Phil J. Peacock, (2020). *Oxford handbook of medical statistics*, 2nd ed. ,Oxford University Press.

Retrieved from: 10.1093/med/9780199551286.001.0001. ISBN-13:9780199551286.

Kazemi A, Hajian S, Ebrahimi-Mameghani M and KhobM. (2018):The Perspectives of Pregnant Women on Health-Promoting Behaviors: An Integrative Systematic Review:*International Journal of Women's Health and Reproduction Sciences* 6(2), 97–105. Retrieved from doi. 10.15296/ijwhr.

Ma, Y., Gao, Y., Li, J., Sun, A., Wang, B., Zhang, J., ... & Rozelle, S. (2020). Maternal health behaviors during pregnancy in rural Northwestern China. *BMC Pregnancy and Childbirth*, 20(1), 1-13.

Navaro, M., Vezzosi, L., Santagati, G., & Angelillo, I.F. (2017). Pregnant women and medicines use: knowledge, attitude, and practice in Italy. *European Journal of Public Health*, 27(3).

Olander, E. K., Smith, D. M., & Darwin, Z. (2018). Health behavior and pregnancy.A time for change. *Journal of Reproductive and Infant Psychology*, 36(1), 1-3.

Pilewska- Kozak, A. B., Dobrowolska, B. B., Tkaczuk-Włach, J., Stadnicka, G., Łepecka- Klusek, C., Pałucka, K., & Ziółkowska, M. (2018). Evaluation of the health behaviors of women in multiple pregnancies—a preliminary study. *Ginekologia Polska*, 89(6), 289-294.

Shiferie, F., Berhane, Y., & Workneh, F. (2020). Healthcare seeking behavior of pregnant women in rural amhara, ethiopia: perception of healthcare providers. Hildt-Ciupińska, K., & Pawłowska-Cyprysiak, K. (2020). Positive health behaviors and their determinants among men active on the labor market in Poland. *American journal of men's health*, 14(1), 1557988319899236..

Short, S. & Mollborn, S. (2015): Social determinants and health behaviors: Conceptual frames and empirical advances. *Current opinion in psychology*, 5, 78-84.

Smadi, A ,&Al smadi, M, (2011).Hygienic behaviors scale for Jordanian College Students ,*The arab journal of Psychiatry*, 22 (1), 83-88

Sukkarwalla, A., Tanwir, F., & Khan, S. (2015). Assessment of knowledge, attitude and behavior of pregnant women in Pakistan towards oral hygiene-A cross-sectional study. *SMU Med J*, 1604(2), 50-66.

Umar, Hana Adil.(2019). Assessment of the health behaviors patterns among women during pregnancy. *Iraqi National Journal of Nursing Specialties*, 32(1), 13-21. Retrieved from <https://search.emarefa.net/detail/BIM-893424>.

Wardle, J., Steptoe, A., Bellisle, F., Davou, B., Reschke, K., Lappalainen, R., & Fredrikson, M. (1997). Health dietary practices among European students. *Health psychology*, 16(5), 443..

Wilkinson, S. A., & McIntyre, H. D. (2012). Evaluation of the'healthy start to pregnancy'early antenatal health promotion workshop: A randomized controlled trial. *BMC pregnancy and childbirth*, 12(1), 1-12.

تقييم السلوك الصحي للنساء الحوامل في مدينة بورسعيد
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التمريض

الخلاصة

الخلفية: يمكن للنساء الحوامل تحسين حالتهم الصحية ، وتحقيق نتائج حمل كافية ، وتحسين نوعية الحياة لكل من الأمهات والأطفال من خلال تبني أنشطة صحية. من المهم أيضًا إدراك أن بعض السلوكيات الصحية قد تتغير نتيجة للحمل ودون تدخل من المهنيين الصحيين. **الهدف:** تقييم السلوكيات المتعلقة بالصحة للنساء الحوامل حول الممارسة فيما يتعلق بالسلوك الصحي المناسب. **الموضوع والطريقة:** التصميم: دراسة وصفية المكان: أجريت الدراسة في سبعة مراكز حكومية للأمومة والطفولة في مدينة بورسعيد. **الموضوعات:** عينة ملائمة من 200 امرأة تتراوح أعمارهن بين 20 و 35 عامًا في مدينة بورسعيد من يوليو إلى ديسمبر 2020 **الأدوات:** تم استخدام أداتين لجمع البيانات تتكون من جدول مقابلات منظم ومقياس للممارسات الصحية. **النتائج:** أظهرت أن غالبية العينات كان لديها مستويات أقل من التغذية واستخدام الأدوية والمجالات النفسية. بالإضافة إلى ذلك ، كان لدى أكثر من الخمسين درجة متوسطة من العناية الشخصية. كما كشفت أن نصف العينة المدروسة كان لديها مستوى مرضٍ من المعرفة فيما يتعلق بالسلوكيات الصحية ، في حين أن العينات المتبقية لديها مستوى غير كافٍ من المعرفة. **الخلاصة:** أظهرت الأبحاث أن أكثر من ثلاثة أرباع العينة التي تم فحصها كانت لديهم مستويات منخفضة من السلوكيات الصحية. **التوصيات:** فصول ما قبل الولادة حول السلوكيات المتعلقة بالصحة لجميع النساء الحوامل. يجب نشر معلومات دقيقة وذات صلة بالسلوكيات المتعلقة بالصحة على النساء الحوامل.

الكلمات المرشدة: الصحة ، السلوك ، المرأة الحامل