



## HUSBAND INVOLVEMENT IN CARE OF MATERNAL MINOR DISCOMFORTS DURING PREGNANCY

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### Abstract

**Background:** Husband involvement in pregnant woman care is effective in improving the health results of the pregnant woman and fetus through practical, emotional, and financial support.

**Aim:** To assess husband involvement in care of maternal minor discomforts during pregnancy.

**Design:** Descriptive design was used in the study.

**Setting:** El-Islamic El-Fath Hospital and Private Hawa Center in Helwan city.

**Sample:** Purposive sample included 71 pregnant women and their husbands.

**Tools:** Three tools were used to collect data. Tool I: A structured interviewing questionnaire. Tool II: Husband knowledge assessment sheet. Tool III: Husband involvement and factors affecting its assessment sheet.

**Result:** The current study showed that most of the studied husbands had knowledge about nausea and vomiting while hadn't knowledge about constipation and leg cramps regarding minor discomforts during pregnancy. In addition to the care provided by the studied husbands, less than half of them were provided physical support and assistance with housework. According to factors affecting husband involvement in care were most friendly attitudes of healthcare providers and less than three-quarters were a near distance of the clinic.

**Conclusion:** The current study concluded that most of the studied husbands had unsatisfactory knowledge regarding minor discomforts during pregnancy, and all the studied husbands involved in care of maternal minor discomforts during pregnancy were going to antenatal care visits, and the factors affecting it, more than half of them were the long waiting time at the clinic.

**Recommendations:** Development of a comprehensive educational booklet for husbands regarding minor discomforts during pregnancy and the importance of husband involvement in the care of pregnancy outcomes.

**Keywords:** Husband involvement, Minor discomforts, Pregnancy.

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## 1. INTRODUCTION

Pregnancy is a creative period in a woman's life. During pregnancy, a woman faces many minor discomforts caused by the hormonal effect. Common minor discomforts during pregnancy may be physiological (breast tenderness, fatigue, nausea and vomiting, urinary frequency, heartburn, constipation, backache, leg cramps, and edema, etc.) or psychosocial (mood swings and lack of family support, etc.) (Hassan et al., 2020).

Husband involvement strategies in pregnant woman's health services. Aim to increase their awareness about emergency obstetric conditions and involve them in delivery plans and complication readiness (Marcelina et al., 2019). Husband involvement strategies also enable the husband to support the couple with obstetric

services, and the couple would adequately prepare for delivery complications (Cho & Ahn, 2020).

Husbands with knowledge of complications during pregnancy and delivery are more likely to promote wives seeking antenatal care services, institutional deliveries, and postnatal services. Moreover, a knowledgeable husband will contribute to delivery preparedness (Jungari & Paswan, 2019).

Factors affecting husband involvement in pregnant woman health care depend not only on the availability of services but also on different other factors such as distance of health care setting, perception of the pregnant woman and husband and their family regarding the need for care, financial income and the interaction between the pregnant woman and health care provider (Adams et al., 2018).

Nurses have a role in providing health education for husbands about ways to decrease minor discomforts and guidance involving care providing for a pregnant woman (**Peneza & Maluka, 2018**). Husband and wife needed a better understanding of new roles in their family to ensure good health of husband-and-wife better cooperation. At the time of pregnancy, the demand for cooperation is more to ensure the safety of the pregnant woman and fetus (**Sari & Ramadan, 2021**).

#### **Significance of the study:**

Evidence suggests that husband involvement may be useful to pregnant woman health. However, the magnitude of the association is not clear. There have also been reflections on possible negative impacts if husband was involved in pregnant woman health care, so husband involvement is necessary to undertake a systematic review to reconcile these opposing views. (**Aborigo et al., 2018**).

National Institute for Care and Health Excellence (NICE) reported that minor discomforts are very common and reported by 50% - 80% of pregnant women. Nausea occurs in 80-85% of all pregnancies during the first trimester. Clinical gastroenterology report shows that heartburn occurs in 30% to 50% of pregnancies. According to American Society for Nutrition, leg cramps have been reported in up to 30% of pregnant women, most commonly in the second and third trimester (**Aziz and Maqsood, 2017**).

In some studies, the prevalence of heartburns has been found to increase from 22% in the first trimester to 39% in the second trimester and 60 % to 70% in the third trimester. (Ibrahim and Ali, 2020). There are limit of studies conducted up to date on husband involvement in care of maternal minor discomforts during pregnancy. Thus, the study was aimed to assess husband knowledge and involvement in care of maternal minor discomforts during pregnancy.

#### **Aim of the study:**

The current study aims to assess husband involvement in care of maternal minor discomforts during pregnancy. The aim will be achievement through the following objectives:

1. Assess husband knowledge regarding minor discomforts during pregnancy.
2. Assess husband involvement in care of maternal minor discomforts during pregnancy.
3. Assess factors affecting husband involvement in care of maternal minor discomforts during pregnancy.

#### **Research Questions:**

- 1.-What is the level of husband knowledge regarding minor discomforts during pregnancy?

- 2.-What is the level of husband involvement in care of maternal minor discomforts during pregnancy?
- 3.-What are factors affecting husband involvement in care of maternal minor discomforts during pregnancy?

## **2. SUBJECT AND METHODS**

#### **Research Design:**

A descriptive design was used to conduct the study.

#### **Study Settings:**

This study was conducted in two settings (El-Islamic El-Fath Hospital and Private Hawa Center) at an antenatal clinic in Helwan city.

#### **Study sample:**

A purposive sample was selected according to inclusion and exclusions criteria as, pregnant women with (normal pregnancy, single fetus, and age 18-35 years) and their husbands. All high -risk pregnancy were excluded.

#### **Sample size:**

Included (71) pregnant women who attended an antenatal clinic, and suffered from minor discomforts, were willing to participate in the study, and their husbands went with their wives through the study period (3 months).

#### **Tools for data collection:**

The data for this study was collected using three tools as follows:

#### **Tool I: A structured interviewing questionnaire:**

This tool was developed by the researcher after a literature review (**Khalil& Hamad, 2019**). It was written in a simple Arabic language and consisted of two parts:

**Part I: Personal characteristics:** This part was used to assess the personal characteristics of pregnant women and their husbands, consisted of seven close-ended questions such as (age, level of education, occupation, and marriage duration).

**Part II: Obstetric history:** This part was used to assess the obstetric history of pregnant women, consisted of five close-ended questions such as (gravidity, parity, abortion, gestational age in weeks, and current minor discomforts that pregnant women experienced from it).

#### **Tool II: Husband knowledge assessment sheet:**

This tool was developed by the researcher after a literature review (**Khalil & Hamad, 2019**). To assess the husband's knowledge regarding minor discomforts during pregnancy, it consisted of six close-ended questions such as (definition, types, causes, danger signs, occurrence, and relieving of minor discomforts during pregnancy).

**Scoring system:**

Knowledge obtained from husbands scored as (Yes) one point, which means (know), and (No) zero point, which means (don't know).

Total scores of knowledges include 31 items with a total score equal to 31.

These scores were summed and converted into a percent score and classified into 2 categories.

**-Satisfactory knowledge:** if the total scores are more than 70%.

**-Unsatisfactory knowledge:** if the total scores are less than 70%.

**Tool III: Factors affecting husband involvement sheet: Which consisted of two parts:**

**Part I: Husband involvement assessment sheet:**

This part was developed by the researcher after a literature review (SA, et al., 2020). To assess husband involvement in care of maternal minor discomforts during pregnancy. It consisted of three questions each question consisted of three questions (two close-ended questions and one open-ended question such as (The minor discomforts experienced pregnant woman, the care that provided by husband to a pregnant woman, and how many times that husband went with the pregnant woman to visit antenatal care clinic in the first, second, and third trimesters).

A score of one point if the answer (No) while a score of two points if the answer (Yes).

**Part II: Factors affecting husband involvement:**

This tool was adopted from (Craymah, et al., 2017), and used to assess factors affecting the husband involvement in care of maternal minor discomforts during pregnancy, it consisted of eight close-ended questions such as (living with a pregnant woman, distance from home to antenatal clinic, poor couple communication, prohibitive cultural norms, work schedules of husband, financial income, an attitude of healthcare providers and waiting time at an antenatal clinic).

**Validity:**

Validity was tested through a jury of three experts in maternity & newborn health nursing, who reviewed the content of tools. Opinions elicited regarding the format, layout, consistency, accuracy, and relevancy of the tools to measure the content validity of the tool.

**Reliability:**

The tool was assessed by Cronbach's alpha to check the internal consistency and it was as follow Tool II entitled " Husband knowledge assessment sheet "0.865, which refers to be reliable, tool III: Part I entitled "Husband involvement assessment sheet" 0.803 & Part II entitled "Factors affecting husband involvement assessment sheet" was 0.845.

**Pilot study:**

The pilot study was done on 10 % (7 pregnant women and their husbands) of the sample to examine the clarity of questions and time needed to complete the study tools. Subjects participated in the pilot study were included from the study.

**Fieldwork:**

- This study was conducted in two settings (El-Islamic El-Fath Hospital and Private Hawa Center) at an antenatal clinic in Helwan city. Data were collected during the period from the beginning of September 2022 to the end of November 2022, after getting official permission. The researcher attended from 6 pm to 10 pm to collect data at two settings alternately, average (1-2) sheets/day.
- In the beginning, the researcher introduced herself and explained the purpose of the study to pregnant women and their husbands to gain their confidence and trust to convince them to participate in the study, and oral consent was obtained from them.
- The researcher distributed a questionnaire to the pregnant women and their husbands and explained tool I, the first part to collect data about personal characteristics and the second part to assess the obstetric history of pregnant women. This tool was fulfilled in about (15-20) minutes.
- Then the researcher assessed husbands' knowledge and involvement in care of maternal regarding minor discomforts during pregnancy by using tools II and III. These tools took about (20-30) minutes to be filled by the researcher from each subject.

**ETHICAL CONSIDERATIONS:**

The research approval was obtained from the Scientific Research Ethics Committee. Faculty of Nursing, Helwan University. Participation in the study was voluntary and subjects were given complete information about the study and their role before obtaining oral consent. The ethical considerations included explaining the purpose and nature of the study, stating the possibility to withdraw at any time, and confidentiality of the information where it wasn't accessed by any other party without taking permission of the participants and having no harm or risks to them. Ethics, values, culture, and beliefs were respected.

**STATISTICAL ANALYSIS:**

All statistical tests were conducted using SPSS for windows version 25.0 (SPSS, Chicago, IL). Continuous data were normally distributed and were expressed in mean  $\pm$  standard deviation (SD). Categorical data were expressed in frequency and percentage. To identify the independent predictors of husband involvement multiple linear regression analysis was used after testing for normal distribution, normality, and analysis of variance for

the full regression models done. Statistical significance was set at  $p < 0.05$ .

### 3. RESULTS

**Table (1):** Shows that more than half 50.8% of studied pregnant women aged from 24-29 years, with mean wife age  $\pm$  SD  $27.577 \pm 0.497$  years. While more than one-third 39.4%, 38% of studied husbands aged from 24-29 years, and 30-35 years. With mean husband age  $\pm$  SD  $31.323 \pm 5.544$  years. Regarding education more than three-quarters 81.7% of wives were high education, and the majority 85.9% of husbands were high education. Regarding occupation, more than half 56.3% of wives were housewives. While less than three-quarters 74.6% of husbands were an employee. Regarding marriage duration, less than half 40.8% was from 1-5 years, with marriage mean  $\pm$ SD  $4.225 \pm 0.479$ .

**Table (2):** Illustrates that more than half 53.5% of them get pregnant from 2-4 times. While less than half 46.5% of studied pregnant women never had delivered. Regarding abortion numbers, more than three-quarters 81.7% of studied pregnant women never had experienced an abortion. While more than, one-third 35.2% of gestational age was from 15-28 weeks with mean gestational age  $\pm$ SD  $21.535 \pm 13.037$ .

**Figure (1):** Shows that more than two-thirds 60.6% of studied pregnant women experienced heartburn, and less than two-thirds 59.2% of them experienced (nausea & vomiting, fatigue, and mood swings). While more than half (54.9%, 53.5%, 50.7%) experienced backache, urinary frequency, and Headache. According to, more than one-third 31% of them experienced breast tenderness, and less than one-third (25.4%, 22.5%, 18.3%, 16.9%, 14.1%) of them experienced (edema, hemorrhoid, varicosities, constipation, and leg cramps).

**Figure (2):** Shows that the most common 91.5% of studied husbands had unsatisfactory knowledge, and only 8.5% of them had satisfactory knowledge.

**Table (3):** Demonstrates that the most common 87.3% of them know nausea & vomiting, and the most common 88.7% of them didn't know was constipation & leg cramp regarding type of minor discomforts during pregnancy.

**Table (4):** Clarifies that in the first trimester of pregnancy, more than three-quarters 78.9% of studied pregnant women experienced nausea

& vomiting. While the care provided studied husbands of pregnant women, all of the husbands went to antenatal care visits with their wives.

**Table (5):** Demonstrates that in the second trimester, less than half 45.1%, 43.7% of studied pregnant women experienced heartburn & backache. However, in the care provided by studied husbands of pregnant women, more than two-thirds 69% of them went to antenatal care visits with their wives.

**Table (6):** Shows that in the third trimester, less than one-quarter 19.7% and 18.3% of them experienced varicosities & edema. While the care provided for pregnant women, more than one-third 31% of them went to antenatal care visits with their wives.

**Figure (3):** Shows that more than half 55% of the frequency of visits in the first trimester was 2-3 times. While more than half 57.1% of the frequency of visits in the second trimester was 2-3 times. Moreover, more than half 54.5% of the frequency of visits in the third trimester was  $\geq 4$  times.

**Table (7):** Illustrates that more than three-quarters 83.1% of studied husbands were living with pregnant women during pregnancy. While less than three-quarters 71.8% of the distance from home to the antenatal care clinic was nearby. In addition, all of the spousal communication wasn't poor. Regarding, the most common 98.6% of cultural norms weren't prevented husband involvement. While more than half 69% of the work schedules of the husband were available. Regarding, the majority 94.4% of financial income had enough. While the most common 97.2% of attitudes health workers were friendly. In addition, more than half 50.7% of the waiting time at the antenatal care clinic was long.

**Table (8):** Illustrates that a statically significant relation was found between the husband's occupation and their total level of knowledge toward minor discomforts during pregnancy. In addition, the table showed that there was no statistically significant relation between wife age, husband age, wife education, husband education, wife occupation, marriage duration, and their total level of knowledge toward minor discomforts during pregnancy.

**Table (1):** Distribution of the studied pregnant women and their husbands according to their personal characteristics (N=71).

Items	No	%
<b>Wife age (years)</b>		
▪ 18 -23	17	23.9
▪ 24 -29	36	50.8
▪ 30 -35	18	25.3
<b>Mean wife age ± SD</b>	<b>27.577 ± 0.497</b>	
<b>Husband age (years)</b>		
▪ 18 -23	2	2.8
▪ 24 -29	28	39.4
▪ 30 - 35	27	38
▪ > 35	14	19.8
<b>Mean husband age ± SD.</b>	<b>31.323±5.544</b>	
<b>Wife education</b>		
▪ Basic	11	15.5
▪ High education	58	81.7
▪ Postgraduate	2	2.8
<b>Husband education</b>		
▪ Basic	10	14.1
▪ High education	61	85.9
<b>Wife occupation</b>		
▪ Housewife	40	56.3
▪ working	31	43.7
<b>Husband occupation</b>		
▪ Employee	53	74.6
▪ Worker	1	1.4
▪ Free work	17	24
<b>Marriage duration (years)</b>		
▪ < 1	24	33.8
▪ 1- 5	29	40.8
▪ 6 -10	12	16.9
▪ > 10	6	8.5
<b>Mean marriage ± SD.</b>	<b>4.225 ±0.479</b>	

**Table (2):** Distribution of the studied pregnant women according to their obstetric history (N=71).

Items	No	%
<b>Gravidity</b>		
▪ Primigravida	33	46.5
▪ 2-4	38	53.5
<b>Parity</b>		
▪ None	33	46.5
▪ Primiparous	17	23.9
▪ 2	16	22.6
▪ 3	5	7
<b>Abortion</b>		
▪ None	58	81.7
▪ 1-2	13	18.3
<b>Gestational age (Weeks)</b>		
▪ 0-14	23	32.4
▪ 15-28	25	35.2
▪ 29 -40	23	32.4

Mean gestational age  $\pm$  SD. 21.535 $\pm$ 13.037

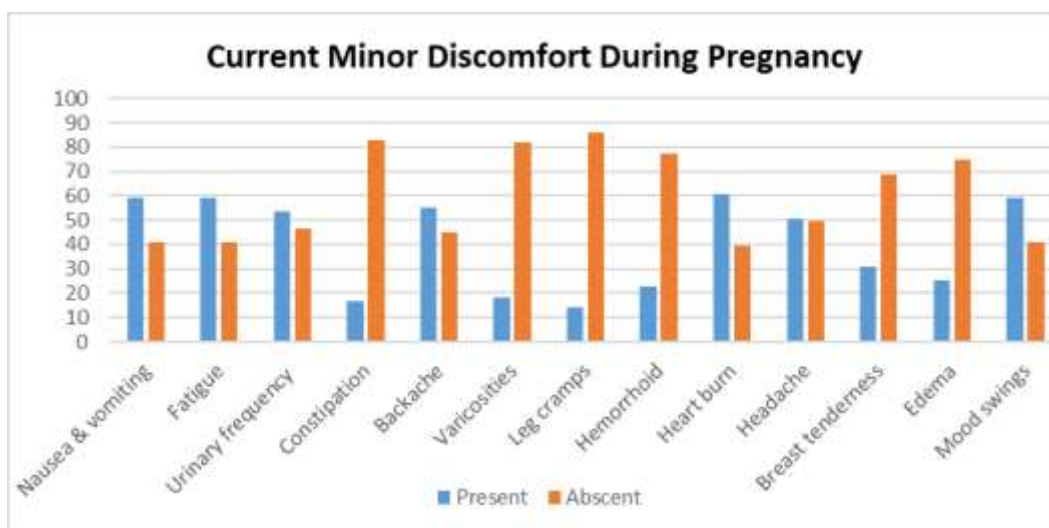


Figure (1): Distribution of the studied pregnant women according to current minor discomfort during pregnancy of the study sample (N=71)

Table (3): Distribution of the studied husbands according to their knowledge regarding type of minor discomforts during pregnancy (N=71).

Items	Yes		No	
	N	%	N	%
<b>Type of minor discomforts during pregnancy</b>				
▪ Nausea & vomiting	62	87.3	9	12.7
▪ Fatigue	48	67.6	23	32.4
▪ Urinary frequency	39	54.9	32	45.1
▪ Constipation	8	11.3	63	88.7
▪ Backache	52	73.2	19	26.8
▪ Varicosities	14	19.7	57	80.3
▪ Leg cramps	8	11.3	63	88.7
▪ Hemorrhoid	13	18.3	58	81.7
▪ Heartburn	39	54.9	32	45.1
▪ Headache	39	54.9	32	45.1
▪ Breast tenderness	19	26.8	52	73.2
▪ Edema	25	35.2	46	64.8
▪ Mood swings	44	62	27	38

Total husband knowledge



**Figure (2):** Distribution of the studied husbands according to their level of knowledge regarding minor discomforts during pregnancy (N=71).

**Table (4):** Distribution of the studied husbands according to their involvement regarding care of maternal minor discomforts at the first trimester from pregnancy (N=71).

Items	Yes		No	
	No	%	No	%
<b>Minor discomforts concerning first trimester:</b>				
▪ Nausea & vomiting	56	78.9	15	21.1
▪ Fatigue	42	59.2	29	40.8
▪ Urinary frequency	21	29.6	50	70.4
<b>The care that provides the husbands of pregnant women</b>				
▪ Provide emotional support	21	29.6	50	70.4
▪ Provide financial support	33	46.5	38	53.5
▪ Provide physical support & assist with housework	35	49.3	36	50.7
▪ Go with wife in antenatal care visits	71	100	0.0	0.0

**Table (5):** Distribution of the studied husbands according to their involvement regarding care of maternal minor discomforts at the second trimester from pregnancy (N=71).

Items	Yes		No	
	No	%	No	%
<b>Minor discomforts concerning second trimester:</b>				
▪ Constipation	10	14.1	61	85.9
▪ Heartburn	32	45.1	39	54.9
▪ Backache	31	43.7	40	56.3
<b>The care provided by the husbands of pregnant women</b>				
▪ Provide emotional support	17	23.9	54	76.1
▪ Provide financial support	28	39.4	43	60.6
▪ Provide physical support & assist with housework	22	31	49	69
▪ Go with wife in antenatal care visits	49	69	22	31

**Table (6):** Distribution of the studied husbands according to their involvement regarding care of maternal minor discomforts at the third trimester from pregnancy (N=71).

Items	Yes		No	
	No	%	No	%
<b>Minor discomforts concerning third trimester:</b>				
▪ Hemorrhoid	6	8.5	65	91.5
▪ Leg cramps	7	9.9	64	90.1
▪ Edema	13	18.3	58	81.7
▪ Varicosities	14	19.7	57	80.3
<b>The care provided by the husbands of pregnant women</b>				
▪ Provide emotional support	8	11.3	63	88.7
▪ Provide financial support	10	14.1	61	85.9
▪ Provide physical support & assist with housework	10	14.1	61	85.9
▪ Go with wife in antenatal care visits	22	31	49	69

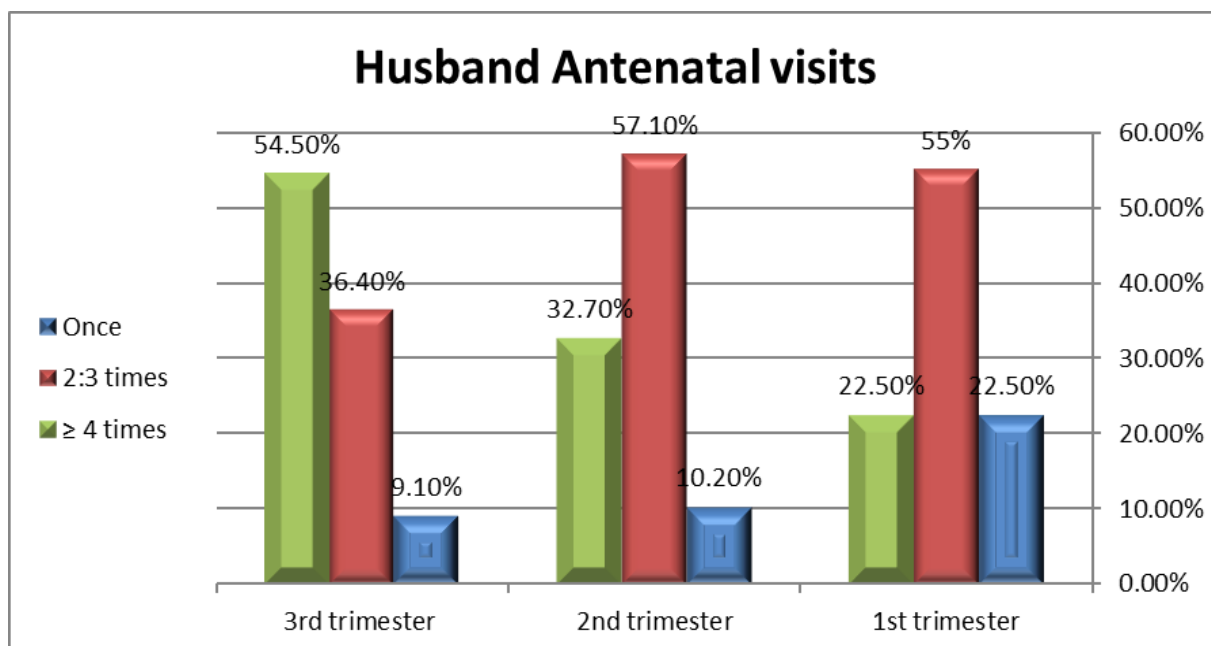


Figure (3): Distribution of the studied husbands according to frequency of antenatal care visits (N=71).

Table (7): Distribution of the studied husbands according to factors affecting involvement of the study sample (N=71).

Items	No	%
<b>Living with pregnant woman during pregnancy</b>		
▪ Yes	59	83.1
▪ No	12	16.9
<b>Distance from home to antenatal care clinic</b>		
▪ Far	20	28.2
▪ Near	51	71.8
<b>Poor couple communication</b>		
▪ Yes	0	0
▪ No	71	100
<b>Prohibitive cultural norms</b>		
▪ Yes	1	1.4
▪ No	70	98.6
<b>Work schedules of husband</b>		
▪ Available	49	69
▪ Not available	22	31
<b>Financial income of husband involvement</b>		
▪ Enough	67	94.4
▪ Not enough	4	5.6
<b>Attitudes of healthcare providers</b>		
▪ Friendly	69	97.2
▪ Unfriendly	2	2.8
<b>Waiting time at antenatal care clinic</b>		
▪ Long	36	50.7
▪ Short	35	49.3



**Table (8):** Relation between personal characteristics and husbands' knowledge (N=71).

Items	Unsatisfactory		Satisfactory		Significance
	No	%	No	%	
<b>Wife age (years)</b>					
• 18-23	16	22.5	1	1.4	X <sup>2</sup> =0.712 , p=0.870
• 24-29	32	45.1	4	5.6	
• 30-35	17	24	1	1.4	
<b>Husband age (years)</b>					
• 18-23	2	2.8	0.0	0.0	X <sup>2</sup> =2.747 , p=0.432
• 24-29	24	33.9	4	5.6	
• 30-35	25	35.2	2	2.8	
• >35	14	19.7	0.0	0.0	
<b>Wife education</b>					
• Basic	10	14	1	1.4	X <sup>2</sup> =0.193 , p=0.908
• High education	53	74.6	5	7	
• Postgraduate	2	3	0.0	0.0	
<b>Husband education</b>					
• Basic	9	12.7	1	1.4	X <sup>2</sup> =0.036 , p=0.612
• High education	56	78.9	5	7	
<b>Wife occupation</b>					
• Housewife	36	50.7	4	5.6	X <sup>2</sup> =0.284 , p=0.466
• Working	29	40.9	2	2.8	
<b>Husband occupation</b>					
• Employee	48	67.6	5	7	X <sup>2</sup> =12.469 , p=0.002*
• Worker	0.0	0.0	1	1.4	
• Free work	17	24	0.0	0.0	
<b>Marriage duration</b>					
• > 1 year	21	29.6	3	4.2	X <sup>2</sup> =1.153 , p=0.764
• 1-5 years	27	38	2	2.8	
• 6-10 years	11	15.5	1	1.4	
• < 10 years	6	8.5	0.0	0.0	

X<sup>2</sup> refers to chi square; retest, \* refers to statistical significance if p value is less than 0.05.

#### 4. DISCUSSION

The minor discomforts usually experienced during pregnancy can be because of pregnancy hormones or the physical changes associated with the gravid uterus, making anatomical, physiological, and biochemical adjustments to pregnancy. The changes that undergo the body during pregnancy can sometimes be discomfort but are rarely reasons for alarm, so through health education and healthy lifestyles, minor discomforts can be managed well by pregnant women (Sowunmi et al., 2021). Husbands can affect pregnancy and delivery by responding to complications, seeking medical help, paying for transport, and helping with housework. However, the role of husbands in pregnant women's health is often neglected (Latur 2021). The current study aimed to assess husband involvement in care of maternal minor discomforts during pregnancy.

As regard personal characteristics, the present study showed that more than half of the studied pregnant women were aged from 24-29 years, with mean ± SD of age 27.577 ± 0.497 years. This result is in the

same line with the study by Sharma & Minhas (2021) who conducted a study about "Incidence of minor ailments of pregnancy among antenatal mothers visiting the out-patient department of a secondary care center" and reported that two-thirds of the studied pregnant women were in the age group 25-29 years.

Conversely, this finding disagreed with the study by Mohamed et al. (2021) under the title "Effect of Instructional Guidelines Regarding Minor Discomforts on Reducing Depression, Anxiety, and Stress Level among Primigravida" and illustrated that less than half of the studied women were in aged 20-25 years with mean± SD of age 19.10 ± 7.68 years old. From the researcher's point of view, this result might be due to the age of pregnancy most safe for pregnancy.

Concerning educational level, the current study showed that the majority of studied pregnant women had high education. This finding agreed with a study by Glossary et al. (2018) who reported a study about " A cross-sectional study about knowledge and practice of primigravida women. Minor and common

pregnancy discomforts" and showed that about of the studied pregnant women had high education. On other hand, this result disagreed with **El-Sayed et al. (2018)** who conducted a study about the "Prevalence of Herbal Use among Pregnant Women Attending Family Practice Center in El-Mahsama Village–Ismailia" and showed that a high percentage of studied pregnant women was read and write.

As regards wife occupation, the result of the current study illustrated that more than half of wives were housewives, this finding is in the same line with a study by **Ibrahim et al. (2021)** under the title "Application of Evidence-Based Measures for Alleviating Minor Discomforts during 1st Trimester of Pregnancy" and found that more than half of wives were housewives.

Regarding husband age, the result of the present study showed that more than one-third of the studied husbands were aged from 24-29 years, and 30-35 years with mean  $\pm$  SD of husbands aged 31.323  $\pm$  5.544years. This finding is in the same line with a study done by **Kashajja et al. (2020)** who conducted a study about "Husbands' experience and perception of supporting their wives during childbirth in Tanzania" and found that mean husband age  $\pm$  SD 30.323  $\pm$  5.544years.

Related to the husband's education level, the result of the current study reported that most husbands had high education. On other hand, this finding disagreed with **Khalil & Hamad (2019)** who conducted a study about "Knowledge of Minor Discomforts during Pregnancy among Pregnant Women Attending Maternal and Pediatric Hospital in Soran City" and illustrated that the lowest percentage of the studied husband had high education.

As regards husband occupation, the result of the current study reported that less than three-quarters of husbands were an employee. This result might be due to the source of income for their family. This result is in the same line with a study by **Daniele (2021)** who conducted a study about "Male partner participation in maternity care and social support for childbearing women a discussion paper" and revealed that the majority of the studied subjects were an employee.

Regarding gravidity, the current study showed that more than half of the studied pregnant women get pregnant from 2-4 times. Conversely, this finding disagreed with a study by **Samarakoon et al. (2020)** under the title "Knowledge and practices regarding self-management of minor ailments among pregnant mothers" and reported that more than two-thirds of the studied pregnant had Primigravida.

Concerning Parity, the current study showed that less than half of the studied pregnant women never had delivered. This result agreed with a study by **Supriya et al., (2023)** who conducted a study about "Knowledge Regarding Antenatal Investigations among Primigravida Attending Antenatal Clinics" and showed that less than two-thirds of the studied pregnant women never had delivered.

As regards abortion, the result of the present study illustrated that more than three-quarters of the studied pregnant women never had experienced abortion. This finding is in the same line with a study by **Ali et al., (2023)** "Effect of prenatal Educational program on Knowledge and Self Care Practices Regarding Prevention of Breast Problems among Lactating Primiparous Women" and revealed that the majority of the studied pregnant women never had experienced abortion. From the researcher's point of view, this result might be due to increasing awareness and education about the importance of follow-up at the antenatal care clinic.

The current study revealed that more than one-third of gestational age was from 15-28 weeks with mean  $\pm$ SD of gestational age 21.535 $\pm$ 13.037. This result is in the same line with a study by **El-Sharkawy & Araby (2020)** under the title "Effectiveness of Self-instructional Module on Knowledge and Remedial Practices Regarding Selected Minor Ailments among Primigravida" and reported that less than half of gestational age was from 15-28 weeks with mean  $\pm$ SD of gestational age 19.94 $\pm$ 4.72 weeks. On other hand, this finding disagreed with a study by **Mohammed & Ahmed (2021)** about "Utilization of Nursing Guideline and Videos Assisted Teaching for Alleviation of Minor Ailments among Primigravida Mothers" and found that mean  $\pm$ SD of gestational age 8.4 $\pm$ 1.7 weeks.

Concerning current minor discomfort, the current study revealed that less than two-thirds of the studied pregnant women experienced nausea & vomiting, fatigue, and mood swings. This study agreed with a study by **Ibrahim & Ali (2020)** who conducted a study about "minor discomforts among pregnant women attending in Beni-Sweif University Hospital" and found that more than half of the studied pregnant women had nausea & vomiting, fatigue, and mood swings. From the researcher's point of view, this result might be due to hormonal changes and occur at the first trimester of pregnancy.

Moreover, the current study showed that more than half were experienced backache, urinary frequency, and headache this finding supported by **Abdelhaliem et al. (2018)** who conducted a study about "Utilization of Self-Care Practice Guideline on Relieving Minor Discomfort (Ailments) Among New Pregnant Woman" and showed that most of the studied pregnant suffer from backache, urinary frequency, and headache. From the researcher's point of view, this result might be due to the pressure of the fetus and occur in the third trimester.

Regarding, types of minor discomforts during pregnancy, the most common are nausea & vomiting. This finding agreed with a study by **Chiang & Shorey (2022)** who conducted a study about "Men's experiences of antenatal care services in low- income and middle- income countries" and showed that most of the studied subjects knew the types of minor discomforts during pregnancy.

Related to total knowledge scores of husbands regarding minor discomfort, the result of the current study showed that the most common of the studied husband had unsatisfactory knowledge. And only less than one-tenth of them had satisfactory knowledge. This finding is in the same line with a study by **Das (2017)** under the title "The role of husbands in women's health-seeking behavior" which reported the highest percentage of the studied husband had unsatisfactory knowledge. From the researcher's point of view, although the majority of husbands had educated but hadn't had enough knowledge about minor discomforts during pregnancy.

Regarding the care provided by the studied husbands of pregnant women, all of the husbands went to antenatal care visits with their wives, and more than half of the frequency of visits was from 2-3 times. This result was supported by a study of **Suryawanshi et al. (2021)** under the title "Involvement of husband in maternal and child health care in rural field practice area of a tertiary medical college in South India" and showed that about three-quarters of the husbands went to antenatal care visits with their wives; more than half of the frequency of visits was from 2-3 times.

The current study revealed that most care provided by the husbands of pregnant women went to antenatal care visits with their wives. This result disagreed with **Pokharel & Pokharel (2023)** who conducted a study about "Women's involvement in decision-making and receiving husbands' support for their reproductive healthcare" and reported that husbands supported more in the area related to finances than for childcare and accompanying to health facilities.

According to factors affecting the involvement of the studied husbands in the care of maternal during pregnancy, the result of the present study showed that more than three-quarters of studied husbands were living with pregnant women during pregnancy. While less than three-quarters of the distance from home to the antenatal care clinic was nearby. In addition, all of the couples' communication wasn't poor. Regarding, the most common of cultural norms wasn't prevented husband involvement.

While more than half of the work schedules of their husband was available. Regarding, the majority of financial income had enough. While the most common attitudes of health workers were friendly. In addition, more than half of the waiting time at the antenatal care clinic was long. This finding agreed with a study by **Sinaga et al. (2022)** who conducted a study about "The Increase of Knowledge, Attitude, and Practice of Husbands toward the Prenatal Care of their Wives Using the Illustrations Having the Local Cultural Nuance" and revealed that factors affect husband shared care for their women because husbands were living with pregnant women and near from clinic.

Moreover, this finding was supported by **Rumaseuw et al. (2018)** under the title "Factors affecting

husband participation in antenatal care attendance and delivery" and showed that most of the studied husband had enough income to help participation in antenatal care attendance.

The current study illustrated that a statically significant relation was found between the husband's occupation and his total level of knowledge regarding minor discomforts during pregnancy. In addition, the result showed that there was no statistically significant relation between wife age, husband age, wife education, husband education, wife occupation, marriage duration, and his total level of knowledge regarding minor discomforts during pregnancy. This result agreed with a study by **Hassan et al. (2020)** under the title " Impact of Tailored Educational Program on Primigravida Anxiety and Knowledge Regarding Minor Discomforts in Upper Egypt" and mentioned that there was a significant statistical relationship between the occupation of the studied subjects and their knowledge.

Conversely, this finding disagreed with a study by **Sharma et al., (2020)** about " Knowledge and practices regarding the management of minor ailments of pregnancy among antenatal mothers" and illustrated that there was a statistically significant relation between wife age, wife education, husband education and their total level of knowledge regarding minor discomforts during pregnancy.

## 5. CONCLUSION

The present study concluded that the most common of the studied husbands had unsatisfactory knowledge regarding minor discomforts during pregnancy, all the husband involvement in care of maternal minor discomforts during pregnancy was going to antenatal care visits, while factors affecting the husband's involvement in care, more than half of the waiting time at the clinic was long. In addition, there was a statically significant relation found between the husband's occupation and his total level of knowledge regarding minor discomforts during pregnancy. The results of the study answer the research questions.

## 6. RECOMMENDATIONS

Considering the current study findings. The following recommendations suggested:

-Development of a comprehensive educational booklet for husbands regarding minor discomforts during pregnancy and the importance of husband involvement in care of maternal minor discomforts on a pregnant woman and fetus health outcomes.

-Replication of the current study on a larger sample and in different settings to generalize the findings.

**Further research:**

- Development of an educational booklet for healthcare providers to inform husbands about pregnancy-related matters as a strategy that can lead to safer pregnancy and delivery.

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