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Pregnant Women Perception Regarding Urinary Tract Infection

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Abstract

Aim: To assess pregnant women' perception regarding urinary tract infection. Material and Methods: The descriptive research design was utilized. The study was conducted in the antenatal outpatient clinic at Benha University Hospital, Egypt. A convenient sample of 105 pregnant women diagnosed with urinary tract infection. Two tools were used for data collection; 1) structured interview questionnaire which consisted of three parts; socio-demographic characteristics of the sample, obstetric data and knowledge of pregnant women regarding urinary tract infection, and 2) pregnant women' attitude towards urinary tract infection. Results: the finding illustrated that 69.5% had unsatisfactory knowledge about urinary tract infection. Meanwhile, 30.5% had satisfactory knowledge about urinary tract infection. More than two thirds 67.6% had negative attitude towards urinary tract infection. There was highly positive correlation between of knowledge and attitude regarding urinary tract infection. Conclusion and Recommendation: Two thirds of the studied women had unsatisfactory knowledge and negative attitude regarding urinary tract infection. The study recommended that raising pregnant women perception regarding urinary tract infection during antenatal visits through educational program.

Keywords: Perception; Pregnant; Urinary tract infection.

1. Introduction

Urinary tract infection (UTI) is a serious health problem affecting millions of people each year. UTIs are one of the most common medical complications of pregnancy. Increased incidence of UTI during pregnancy is due to the morphological and the physiological changes that take place in the genitourinary tract during pregnancy [1]. Symptomatic and asymptomatic bacteriuria has been reported between 17.9% and 13.0% pregnant women respectively [2].

Moreover, during pregnancy, women develop ureteral dilatation, increased bladder tone, and decreased ureteral tone, resulting in increased risk of urinary stasis and uterovesical reflux. Moreover, up to 70% of pregnant women develop glycosuria, which encourages bacterial growth in the urine. All of these factors contribute to the development of UTI during pregnancy [3].

UTI is a common problem around 8.3million pregnant women reported the cases of urinary tract infection per year globally which is due to increase in size and weight of the uterus that directly disturbs the normal mechanism of the bladder and that causes the symptoms like; incomplete voiding, dribbling of urine, frequent micturition. The common microorganism for urinary tract infection is the E. coli that reported in 80% cases and other causes like streptococcus, staphylococcus and urinary catheterization are also the main cause of UTI [4]. Pregnant women with UTI are more likely to develop hypertensive diseases of pregnancy, anemia, chronic renal failure, prematurity, and low birth weight babies [5].

1.1. Significance of the Study

Urinary tract infection considers one of the most frequent health problems in women and pregnant women are more susceptible to it and according to the potential effects on women and the foetus, it is considered very important. Thus, this study aimed to assess pregnant women' perception regarding urinary tract infection.

1.2. Research Questions

What is the level of knowledge among pregnant women regarding Urinary tract infection?
What is the level of attitude among pregnant women regarding Urinary tract infection?
What is the correlation between pregnant women' knowledge and attitude regarding Urinary tract infection?

2. Subject and Methods

The descriptive research design was utilized to fulfill the aim of the current study. The study was conducted in an antenatal outpatient clinic at Benha University Hospital, Egypt. A convenient sample of 105 pregnant women diagnosed with urinary tract infection attended the above mentioned setting at the period of data collection.

Two tools were designed by the researchers after reviewing the literature; first tool: structured interview questionnaire which consisted of the following parts: Part (a): socio-demographic characteristics of the sample included age, educational level, marital status residence, and occupation. Part (b): obstetric data included parity and gestational age. Part (c): knowledge of pregnant women regarding urinary tract infection included 7 items (the meaning of urinary tract infection, causes of the urinary tract infections, sign and symptoms, diagnostic tests,

complications related to UTI, management and treatment of UTI and preventive measures of UTI). Scoring system for knowledge was determined through (2) score for correct answers, (1) score for incorrect answers/ don't know. The total score level was graded as unsatisfactory knowledge <60%, and satisfactory knowledge ≥ 60%.

Second tool: pregnant women' attitude towards urinary tract infection included 10 items such as (think pregnant women are more prone to UTI than nonpregnant, think UTIs are serious, think unhygienic practices cause UTI ……….etc.). Scoring system for attitude was determined through three point Likert scale; (3) score for agree, (2) score for netural and (1) score for disagree. The total score level was graded as a negative attitude <60%, and positive attitude ≥60%.

The tools were revised for appropriateness and comprehensives of contents through a panel of three experts in the field of maternity nursing. The panel ascertained the content validity of the tools. Internal consistency of the first tool equals 0.84, and the second tool equals 0.81.

Informed oral consent was obtained from the participants and the confidentiality of the received information was maintained. Each parturient has the right to withdraw from the study at any time without any interference with the care provided. Also, privacy and anonymity were secured.

Official permission for conducting was obtained from the director of Benha University Hospital after explaining the aim of the study. A pilot study was carried out before starting the data collection. The pilot study was carried out on ten percent of the total period (6 weeks) to evaluate the applicability and clarity of tools and estimate the time to fill tools. Then the necessary modifications were done.

The data were collected over a period of six months from the beginning of December 2018 to May 2019, three days per week. Each woman was interviewed individually by the researcher at of the previously mentioned setting to assess pregnant women knowledge and attitude, each interview ranged from 20 - 25 minutes.

The collected data was tabulated and analyzed using SPSS version 22. Descriptive statistics were applied (frequencies, percentages, mean and standard deviation). Pearson correlation coefficient test was utilized. A statistically significant difference was considered at p-value ≤ 0.05 and a highly statistically significant difference was considered at p-value ≤ 0.001.

3. Results

Table (1) shows that more than three quarters of the studied women 78.1% were aged < 30 years old with mean age 29.62 ± 2.81 years. The majority of them (81.9%) were married where (73.3%) lived in rural area. In addition, more than half of the studied women (61.0%) had secondary educational level and 75.2% were housewives.

Table (2) displays that more than half of the studied women (56.2%) have three and more previous pregnancy. Less than half of them 40.9% and 48.6% were in the second and third trimester respectively.

Figure (1) illustrates that 69.5% had unsatisfactory knowledge about urinary tract infection. Meanwhile, 30.5% had satisfactory knowledge about urinary tract infection.

Figure (1) reveals that 67.6% had negative attitude towards urinary tract infection. Meanwhile, 32.4% had positive attitude towards urinary tract infection.

Table (3) displays that there was highly positive correlation between of knowledge and attitude regarding urinary tract infection.
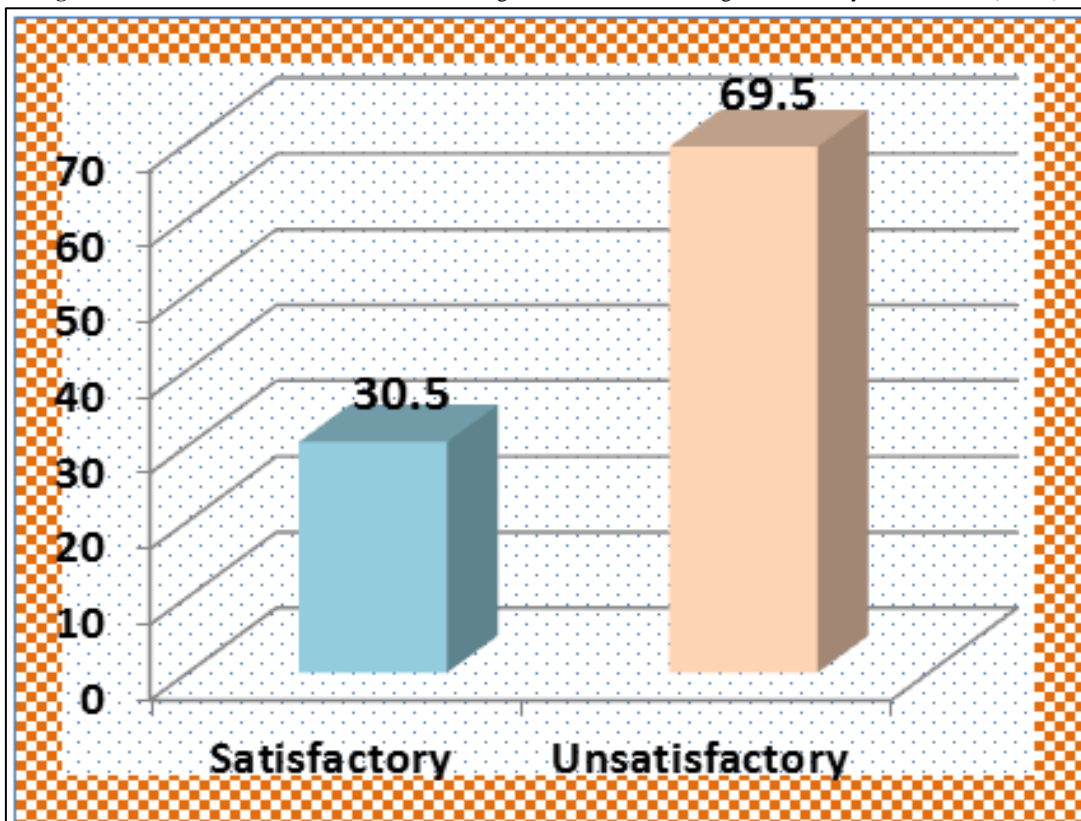
Table-1. Distribution of the studied women according to their demographic characteristics (n=105)

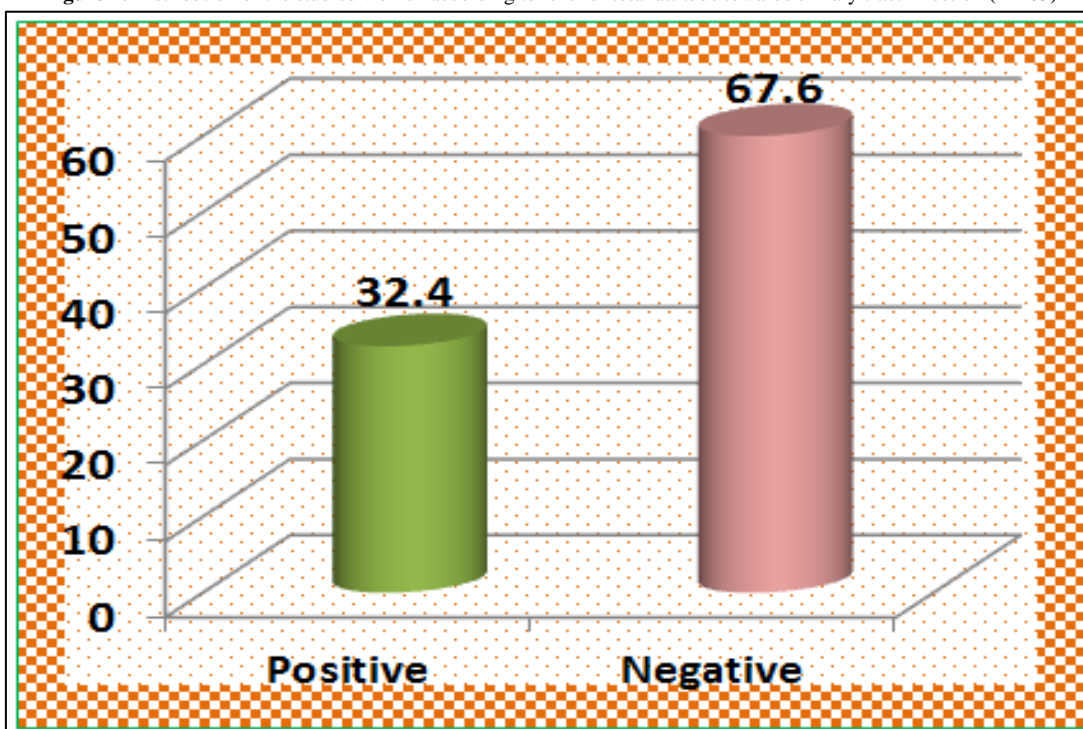| Demographic characteristics	No.	%
Age (years)		
< 30	82	78.1
≥ 30	23	21.9
Mean ± SD	29.62 ± 2.81	
Residence		
Rural	77	73.3
Urban	28	26.7
Educational Level		
Basic education	16	15.2
Secondary education	64	61.0
High education	25	23.8
Marital status		
Married	86	81.9
Divorced	19	18.1
Occupation		
Working	26	24.8
Housewife	79	75.2

Table-2. Distribution of the studied women according to their obstetrics history (n=105)

Obstetrics history	No.	%
Gravidity		
One	12	11.4
Two	34	32.4
Three and more	59	56.2
Gestational age		
First trimester	11	10.5
Second trimester	43	40.9
Third trimester	51	48.6

Figure-1. Distribution of the studied women according to level of total knowledge about urinary tract infection (n=105)

Figure-2. Distribution of the studied women according to level of total attitude towards urinary tract infection (n=105)

Table -3. Correlation between of Knowledge and Attitude regarding urinary tract infection (n=105)

Variable	Knowledge	
	r	P value
Attitude	0.751	0.000

4. Discussion

The findings of the current study revealed that mean age of the studied women was 29.62 ± 2.81 years This result is consistent with a study conducted by Ahmed [6], who revealed that the mean age of the study sample was 29.8±9.89, where about half of women their age ranged between 20-30 years.

Multiparty are at high risk of urinary tract infection due to trauma to the pelvic floor during Labor or weakening of the supportive structures. The finding of the current study revealed that more than half of the studied women have three and more previous pregnancy. Less than half of them were in the second and third trimester respectively. This is supported by Sescon et al. who pointed out that the association between multiparity and UTI is due to profound physiologic changes affecting the entire urinary tract during pregnancy has a significant impact on the natural history of UTI during gestation.

The research findings answered the research questions; on investigating the first question of the research, the finding of the present study showed that more than two thirds had unsatisfactory knowledge about urinary tract infection. Meanwhile, more than one quarter had satisfactory knowledge about urinary tract infection.

This finding is supported by Minassian, et al. [7], who mentioned lacking of knowledge about physiological changes during pregnancy and that the pregnant women are at high risk for urinary tract infection. Moreover, Adhikari and Dhakal [4] reported that knowledge about urinary tract infection (24.39%) had poor knowledge, (65.05%) had average knowledge and (10.56%) of respondents had good level of knowledge. Also, Lele, et al. [8], found that 65.05% had average knowledge and 24.39% had poor knowledge regarding urinary tract infection.

Regarding pregnant women' attitude towards urinary tract infection, the study result illustrated that more than two thirds had negative attitude towards urinary tract infection. Meanwhile, less than one third had positive attitude towards urinary tract infection. This is in accordance with Bhat [9], who revealed that 69.7% had positive attitude and 30.3% shown neutral attitude towards urinary tract infection during pregnancy.

Concerning the third question, the study result illustrated that there was highly positive correlation between of knowledge and attitude regarding urinary tract infection. This is consistent with Bhat [9], who showed the strongly positive correlation ($r = 0.97$) between knowledge and attitude.

5. Conclusions and Recommendations

Based on the findings of the present study, it can be concluded that two thirds of the studied women had unsatisfactory knowledge and negative attitude regarding urinary tract infection. The study recommended that raising pregnant women perception regarding urinary tract infection during antenatal visits through educational program. Replication of the study using a probability sample in different hospital settings is recommended for generalization of results.

Acknowledgement

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