

Postpartum Depression: A perceptive study from Saudi Arabia



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Abstract— One in seven women are affected by postpartum depression which is an established clinical condition which affects women after childbirth. Pregnant women ought to be screened by employing a standardized tool evaluating them for depression and anxiety symptoms on through the pregnancy tenure to identify and manage the women at risk of developing postpartum depression. The purpose of the study was to assess the knowledge perception of postpartum depression among citizens of Al-Ahsa located in Eastern Province of Saudi Arabia. An online questionnaire oriented cross sectional study was executed over a period of one month. Study data was analyzed and evaluated in SPSS software version 21. A total of 446 participants responded the questionnaire, with a mean age of (35.2 ± 10.6 SD). Female participants (55.7%) were slightly more in number than the males. Most of the participants were married, employees, undergraduates and graduates. Regarding prevalence of Postpartum depression (PPD) most of them were unaware (60.4%) but majority identified symptoms of PPD correctly. Larger number of participants (74.3%) reflected that psychological intervention is effective in treating PPD. Half of them (54.8%) did not have the idea about vitamins use in the treatment of PPD. Overall total of 60.51% participants answered the questionnaire correctly. Associations of the responses with independent variable were not statistically significant. It is concluded that Al-Ahsa inhabitants were capable of recognizing postpartum symptoms, knew how it interferes with women quality of life and affirmed the psychological intervention efficacy in the management of women with postpartum depression.

Keywords: Knowledge, Perception, Postpartum depression, Childbirth

1. Introduction

Postpartum depression (PPD) is defined as the development of depression following a childbirth. The postpartum period is defined differently according to the classification system [1]. Diagnostic and Statistical Manual of Mental Disorders 5th edition (DSM-5) consider the postpartum period within 4 weeks after childbirth [2], while the international classification of diseases, 10th revision (ICD-10) consider it to be within 6 weeks [3]. The incidence of Postpartum Depression is 12%, with high prevalence among the middle eastern women with 28% [4]. Primary educational level, pressure to have a male child, and low socio-economic status, and others are found to be risk factors for developing PPD [5,19]. It greatly affects the mother and her child. Looking after the newborn is also considerably neglected by the mothers who suffers PPD and possibility of inflicting harm is always there. A study published in 2011 stated that postpartum depression increases the likelihood of behavioral problems

among the children of the mothers included in the study [6]. Mothers experiencing postpartum depression are at risk of developing bipolar disorder [7-8]. A study by Lumbanraja showed that antenatal education reduces the symptoms of PPD [9]. Knowledge regarding definition, symptoms, assessment and management of PPD among Saudi midwives and perinatal nurses found to be lacking in one study [10]. We carried out this study to assess and AlAhsa citizens understanding of Postpartum Depression, its causation factors and management aspect.

2. Methodology

A cross-sectional survey was conducted online to study the knowledge perception of Al-Ahsa citizens regarding Postpartum Depression. The online survey was hosted by google forms. Ethical approval was taken from College of Medicine Ethical Committee in King Faisal University. The study targeted the general population of Al-Ahsa. We included citizens with ages between 15 - 60 years in this study. Participants with current or past psychiatry illness were excluded from the study. Data collection done with convenience sampling from February 2020 to March 2020. The study goals were explained to participants, and their consents were obtained at the beginning of the survey. Participants were reassured that their perceptive knowledge views will not be disclosed publically and the results will be analyzed generally.

Participant's sociodemographic data were obtained including: gender, age, nationality, residency, educational level, marital status, and the income. Information of perception concerning postpartum depression was assessed in our sample of participants by employing a validated Knowledge about Postpartum Depression Questionnaire (KPPD-Q)[11], that composed of fifteen questions having the choices of answers as three options (True, False or I don't know as a third choice). It had been translated to Arabic language. The reliability and internal consistency of the Arabic version was assessed by alpha-Cronbach's test that was ($\text{Alpha} = 0.752$). The questionnaire focused on the awareness perception of postpartum depression prevalence, its accompanied symptoms, associated risk factors, effects and management. 1 point is for every correct answer; high level of knowledge is considered with the higher total scores. Study data was analyzed and evaluated by SPSS version 21 and extracted as frequencies and percentages in tables and total score depicted in figure. Association of variables also checked for significance with Chi-square test.

3. Results

A total of 446 participants completed the study questionnaire. Mean age was (35.2 ± 10.6 SD). The female participants in the survey were 55.7% rest were males. Most of the participants were married, skilled employees, currently studying or graduated from university.

Table (1) shows the detailed sociodemographic characteristics of the respondents.

Table 1 sociodemographic characteristics

	Frequency	Percentage
Gender		
Male	197	44.1%
Female	249	55.7%
Education		
Primary school	5	1.1 %
Middle school	12	2.7%

High school	105	23.5%
university	324	72.5%
Job		
Housewife	68	15.2 %
Unemployed	72	16.1 %
Retired	30	6.7 %
Student	40	8.9 %
Skilled employee	184	41.2 %
Healthcare provider	52	11.6 %
Marital status		
Married	389	87 %
Unmarried	49	11 %
Divorced/widowed	8	1.8 %
Salary		
Less than 3500 SR	47	10.5%
3500-10000 SR	166	37.1%
More than 10000 SR	233	52.1%
Psychiatric disease		
Yes	14	3.1%
No	432	96.6%

Regarding responses to KPPD-Q, most of the study sample answered I don't know for the prevalence of PPD in Saudi Arabia. Most of the participants correctly identified PPD symptoms. About 74.3% considered that psychological intervention is effective in treating PPD. Most of the participants (54.8%) didn't know about vitamins use in the treatment of PPD shown in Table (2)

A total of 60.51% participants answered correctly. shown in fig (1).

Table 2: Responses to Knowledge Perception towards Postpartum Depression

Question	TrueAnswers	FalseAnswers	I don't Know
1-The prevalence of postpartum depression is considered high in KSA	107 (23.9%)	69 (15.4%)	270 (60.4%)
2-severe sadness and irritability within a period of more than 15 days, are symptoms of postpartum depression	278 (62.2%)	34 (7.6%)	134 (30.0%)
3-The support of family and friends is enough to overcome postpartum depression	283 (63.3%)	99 (22.1%)	64 (14.3%)
4-Postpartum depression is mainly caused by hormonal changes	279 (62.4%)	40 (8.9%)	127 (28.4%)
5-There is only postpartum depression when women think of suicide	14 (3.1%)	389 (87.0%)	43 (9.6%)
6-Psychological intervention is effective in treating postpartum depression	332 (74.3%)	34 (7.6%)	80 (17.9%)
7- Women with symptoms of depression or anxiety during pregnancy are more likely to have postpartum depression	244 (54.6%)	44 (9.8%)	158 (35.3%)

8- Women with postpartum depression can respond as well as another woman to their baby's needs	64 (14.3%)	248 (55.5%)	134 (30.0%)
9- Treatment of postpartum depression requires professional help	328 (73.4%)	43 (9.6%)	75 (16.8%)
10- Negative thoughts about the baby or about the possibility of hurting him are frequent in postpartum	210 (47.0%)	77 (17.2%)	159 (35.6%)
11- Postpartum depression usually does not affect woman's appetite and sleep	36 (8.1%)	315 (70.5%)	95 (21.3%)
12- Women with postpartum depression find it more difficult to respond to the needs of their partner and other children	351 (78.5%)	14 (3.1%)	81 (18.1%)
13- General practitioner cannot help a woman with postpartum depression	147 (32.9%)	163 (36.5%)	136 (30.4%)
14- Only women with a history of previous psychological problems (depression, anxiety) or who did not wish to become pregnant develop postpartum depression	32 (7.2%)	306 (68.5%)	108 (24.2%)
15- The use of supplements and vitamins is an effective treatment for postpartum depression	97 (21.7%)	104 (23.3%)	245 (54.8%)

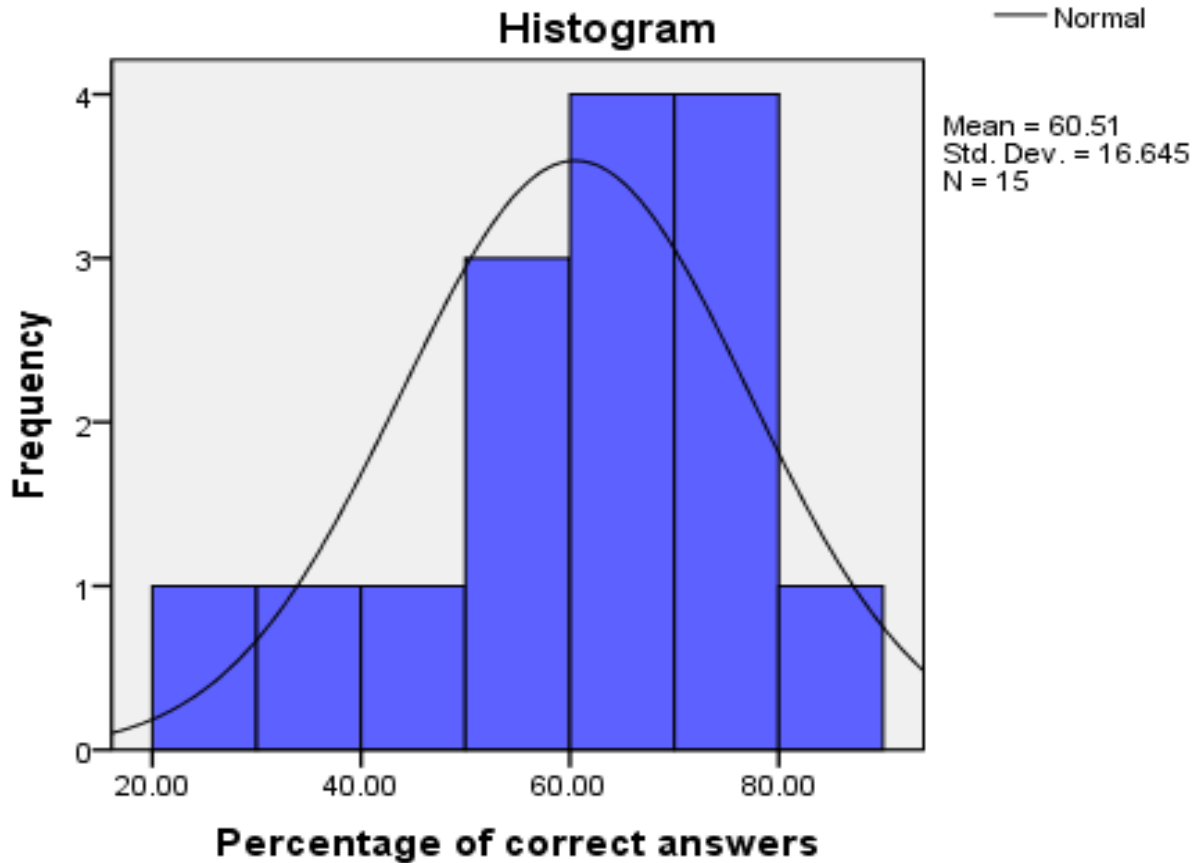


Fig (1): Histogram for the Mean percentage and standard deviation of correct answers

Citizens of Al-Ahsacame up with high number of correct answers in contrast to the other geographical regions, but there was no statistically significant difference p-value retrieved was more than 0.05(p- value 0.458). Participants found with high correct answers were found to be among high salaried, skilled employees, healthcare providers and university graduates, however there was no significant statistical difference.

4. Discussion

The results in our study showed that most of the participants were unaware of the high prevalence of PPD in Saudi Arabia. Another study conducted in Saudi Arabia to assess the awareness of PPD among nurses and midwives showed most of the participants couldn't estimate the prevalence of PPD [10]. These results are similar to our study reflecting low level of postpartum depression awareness. Likewise, similar results were found in a study that targeted the general population of Portuguese [11]. Another study in Dammam that was executed in 5 large primary health centers, 17.8 % of participants knew postpartum depression prevalence [13]. On the contrary a study conducted for a thesis in Jeddah, Saudi Arabia revealed high awareness about prevalence of postpartum depression (45.66%) among mothers attending the well-baby clinics [12].

Our study demonstrated that most of the respondents were able to recognize PPD symptoms, including the time period required for diagnosis and how it interferes with life. In two studies one from Eastern province of Saudi Arabia and other from Portugal, majority of study participants were aware of

postpartum depression symptoms [11,13]. Psychotherapy found to be helpful in preventing PPD and decreasing its symptoms [14], meanwhile most of our sample (74.3%) agreed with the sorting out professional help and psychological intervention. Same results are found in two similar studies [11,15]. Literature review concluded that low vitamin D level during pregnancy is associated with increased risk of PPD [16]. In our study most of them were not knowing true relationship of vitamin D and postpartum depression therefore selected wrong answers. These results are also found same as in the Portuguese study [11]. The score level of knowledge in this study is considered good but not significant (60.51%). Similar percentage was found in Dammam study regarding the knowledge of PPD [13]. Their results showed no statistical difference with different regions, salary, career, and educational level regarding the level PPD knowledge in the study. In contrast a study targeted nurses and midwives showed significant difference in educational level and knowledge of PPD [10]. Age, sex, education, career was found to have significant correlation with PPD knowledge [11]. This could be due to the cultural and geographical differences. In our study we did not find statistical association of demographic factors with participants' responses.

In a systematic review they found five of nine studies (55%) showed a significant association between vitamin D and PPD [17]. A case control study in Iran identified association of decreased blood quantities of vitamin D and occurrence of postpartum depression [18]. In our study less than one quarter of respondents (21.7%) expressed Vitamin D a right choice while more than half respondents were unaware.

5. Conclusion

We conclude that although participants were lacking knowledge perception for PPD prevalence but they had recognized postpartum symptoms, knew how it interferes with women quality of life and affirmed the effective role of psychological intervention in treating women with postpartum depression.

6. Declaration

Competing interest

The authors do not have any conflict of interest regarding this work.

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Authors contribution

All authors contributed in this study. KMA and FT conceived and designed the study, conducted research, and provided research materials. AHO and ZAA collected, organized, analyzed and interpreted data. FMA and MAA wrote initial and final draft of article, and provided logistic support. All have reviewed the final draft and will be held answerable for the material and similarity index of the manuscript.

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