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KNOWLEDGE AND AWARENESS OF DEPRESSION AMONG PERINATAL WOMEN ATTENDING MATERNAL AND CHILD HEALTH CLINICS: A CROSS SECTIONAL STUDY

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Abstract

Introduction: *Perinatal depression is a significant mental and public health problem which occurs during pregnancy until the first year of postnatal period. It is worth to study on knowledge and awareness of perinatal depression is an essential element in managing the problem. This study aimed to assess knowledge and awareness of perinatal depression among perinatal women.* ***Methodology:*** *A cross-sectional study was conducted at four selected maternal and child health clinics in Kuantan, Pahang. A validated self-administered questionnaire on knowledge and awareness of perinatal depression was distributed to 265 perinatal women. Data were analysed by using an independent sample t-test, Pearson correlation and simple linear regression.* ***Results:*** *The prevalence of perinatal depression was 20.4% (10.6% of antenatal and 9.6% of postnatal). Knowledge of perinatal depression among perinatal women had no significant association with antenatal and postnatal depressive symptoms (p=0.33 and p=0.24), respectively. It was found that there was no association between awareness of perinatal depression and depressive symptoms among the women. However, there was a positive linear relation between knowledge and awareness of perinatal depression (r=0.141, p=0.021).* ***Conclusion:*** *Knowledge and awareness of perinatal depression were similar among antenatal and postnatal women who were at risk and not at risk of the depression. However, it is important for health care practitioners to screen for perinatal depression and enhance knowledge and awareness of perinatal depression among women to reduce the number of perinatal depression.*

Keyword: antenatal, postnatal, perinatal depression, knowledge, awareness

INTRODUCTION

Perinatal depression is a depression experienced by women during pregnancy, around childbirth or within the first year postnatal (Muzik & Borovska, 2010). It may be influenced by some factors during pregnancy and after childbirth, such as life stress, lack of social or partner support, previous mental health disorders, migration status, or history of abuse (Fredriksen et al., 2017). This mental health problem was under diagnosed due to lack of knowledge about symptoms, risk factors and treatments for the depression (Fonseca et al., 2017). Furthermore, women had poor recognition on the usefulness of interventions regarding perinatal depression (Ericksen et al., 2005). Early recognition of perinatal depression is important to prevent women from committing suicide or even harm their newborns (World Health Organisation [WHO], 2017). For example, infant mortality is commonly experienced by women who have poor knowledge and recognition regarding the depressive symptoms (Mobley, 2014).

It was reported that there was a limited knowledge and understanding of postnatal mental wellbeing among postnatal women, therefore commonly were often not able to recognise these as problematic (Arifin, Cheyne & Maxwell, 2020). The impetus of this study was derived from the consideration that women knowledge and awareness must be understood in establishing preventative interventions for PND. Therefore, this study aimed to assess level of knowledge and awareness of perinatal depression among postnatal women in Kuantan, Malaysia. The study outcome can help health care workers to better understand the situation and identify the gaps needed in providing women with knowledge and enhance their awareness. In addition, this can assist clinical practices to provide better quality of care

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by enhancing knowledge and awareness of depression during pregnancy and after childbirth which may occur to the perinatal women.

MATERIALS AND METHODS

A cross-sectional study was conducted from February 2018 to March 2018 at four maternal and child health clinics in Kuantan. This study was approved by the Kulliyyah of Nursing Postgraduate and Research Committee (KNPGRC), Medical Research and Ethics Committee (MREC), District Health Office Kuantan. A written consent was obtained from all participants.

Participants and Procedure

Eligibility criteria to participate in the study were: (a) a Malaysian woman, (b) currently pregnant or had given birth during the previous 12 months, (c) 18 years or older, (d) able to understand Malay or English language. They were ineligible to participate if they have a history of mental health disorders.

Measures

Sociodemographic data: Participants were asked a series of demographic questions, including age, race, marital status, educational level, employment status, perinatal period (antenatal or postnatal period), number of children, present gestation for antenatal women, gestation at birth for postnatal women, and history of mental health disorders.

Knowledge of perinatal depression: This was modified from 20 multiple choice questions to assess knowledge of perinatal depression (Jones et al., 2011).The questionnaire consisted of 19 items which evaluated knowledge about proportion, risk factors for depression, reason for depressed women not receiving adequate help, and treatments for depression during pregnancy and after childbirth. The total score was 19 and the higher score showed that the women had good knowledge.

Awareness of perinatal depression: The depression vignette was used to assess awareness of perinatal depression regarding interventions and usefulness of help that will most likely be used by Mrs. Suraya (in the vignette) (Ericksen et al., 2005). The questionnaire consisted of 13 items, which should be answered on a 5-point Likert scales (from 0 = strongly not recommended to 5 = most recommended). The total score was 65 marks and the highest mark showed the highest awareness of perinatal depression.

Symptoms of depression: The validated *Bahasa Melayu* version of the Edinburgh Postnatal Depression (EPDS) was used to assess depressive symptoms among all participants (Cox et al., 1987). EPDS is an effective tool to screen for postnatal as well as antenatal depressive symptoms (Rashid & Mohd, 2017).It consists of 10 items which evaluates on the way participants feel during the past seven days with 4-point Likert scales (0 = never, 1 = rarely, 2 = sometimes, 3 = always). The total score is 30 and a score greater than 11 indicates as having symptoms of depression.

Both the knowledge and awareness questionnaires were originally developed in English language and underwent a process of forward and backward translation between English and *Bahasa Melayu* by professional translators. A pre-test was carried out among 10 samples from various backgrounds to ensure that the tools were understood, and to identify any problematic words or phrases before the actual study was carried out.

A pilot study was also conducted to determine the reliability of the questionnaires. A total of 29 participants from the sample size (10%) responded to the questionnaires. Data from the pilot study were analysed by using SPSS software Version 20.0 to identify the Cronbach alpha value. The Cronbach alpha value of the awareness score, knowledge score and perinatal depression questionnaires were 0.75, 0.71 and 0.82, respectively, which indicated that the tools were reliable for the study.

RESULTS

Sociodemographic characteristics

A total of 265 women were willing to answer the questionnaires completely. The mean age of participants was 30.7 years (SD 5.397; range 18–45 years). The majority of participants (95.5%) were of Malay ethnicity. Most of the participants were employed in the private sector (24.2%) and government sector (30.9%) while others were unemployed and a housewife (44.9%). Half of the participants in this study achieved at least tertiary education (52.5%), followed by secondary education (45.3%) and only a small percentage had completed the primary school education (2.3%). A total of 140 participants (52.8%) were multigravida (having 2 to 4 children). However, 99 (37.4%) and 26 (9.8%) of the participants had one child or more than five children, respectively. The total number of

antenatal women who participated in this study was 130 (49.1%), and 135 participants (50.9%) were postnatal women.

Prevalence of perinatal depression

Table 1 shows that the prevalence of depression is 20.4%. From this figure, 10.6% were from antenatal mother while the remaining 9.8% were from postnatal group. The result also showed that the majority of women in this study were not at risk of perinatal depression.

Table 1: Prevalence of perinatal depression

N = 265	Depression	
	At risk (EPDS ≥ 12) n (%)	Not at risk (EPDS < 12) n (%)
Antenatal	28 (10.6%)	102 (38.5%)
Postnatal	26 (9.8%)	109 (41.1%)
Total	54 (20.4%)	211 (79.6%)

Knowledge score of perinatal depression.

The maximum score for knowledge of perinatal depression was 19, whereas the minimum score was 0. A higher score indicated better knowledge. In this study, the minimum score achieved by participants was 1 and the maximum score achieved was 15. The mean of total knowledge score was 7.71 (SD 2.08). Among all the 19 items asked in the questionnaire, Item 1 scored the highest correct mark, whereby 75.8% of perinatal women in the study were able to answer. Item 1 required participants to choose 1 out of 4 given statements which were concerned with general description of perinatal depression. Perinatal women in the study also knew that certain common medical diseases in pregnancy, such as pregnancy induced hypertension, pre-eclampsia and spontaneous abortion, were associated with perinatal depression whereby 77% of the participants had responded correctly. In addition, the study was aimed to look for participants with knowledge of perinatal depression treatment. It revealed that two third of them knew the importance of supportive counselling and peer support group in managing a mild perinatal depression. However, only 46.4% realised the role of anti-depressant medication in treating moderate to severe perinatal depression. In this study, knowledge of risk factors for developing perinatal depression was low, in which only 12.5% of participants were able to provide the correct response.

Association between knowledge of perinatal depression with perinatal depression

Table 2 shows an association between knowledge and perinatal depression among participants. The finding indicated that the mean score of knowledge was almost similar among participants who were found to be at risk of perinatal depression and those who were not at risk.

Table 2. Association between knowledge and perinatal depression

Variables	n	Mean	SD	*p* value
Antenatal				
At risk (EPDS≥12)	28	7.39	2.83	0.33
Not at risk (EPDS<12)	102	7.87	2.13	
Postnatal				
At risk (EPDS≥12)	26	7.27	1.51	0.24
Not at risk (EPDS<12)	109	7.75	1.93	

Association between awareness of perinatal depression with perinatal depression

Table 3 shows the results of association between awareness and perinatal depression. As shown in the table, there was no significant association between awareness of perinatal depression among all participants, regardless of whether they were at risk or not at risk of developing perinatal depression.

Table 3. Association between awareness and perinatal depression

Variables	n	Mean	SD	*p* value
Antenatal				
At risk (EPDS≥12)	28	44.68	9.61	0.46
Not at risk (EPDS<12)	102	45.83	6.49	
Postnatal				
At risk (EPDS≥12)	26	43.15	8.51	0.09
Not at risk (EPDS<12)	109	45.83	6.82	

Relationship between knowledge and awareness of perinatal depression

Table 4 shows that there is a positive correlation between knowledge and awareness of perinatal depression (r = 0.141, p = 0.021). It indicates that a high score of knowledge is associated with a high score of awareness.

Table 4: Pearson correlation between knowledge score and awareness score

N=265	Awareness score	
Knowledge score	*r*	*p* value
	0.141	0.021

DISCUSSION

The overall aim of this study was to assess the awareness and knowledge regarding perinatal depression among antenatal and postnatal women. It was reported in 2017 that the prevalence of perinatal depression among Malaysian mothers was 20% (Rashid & Mohd, 2017). The study result was also compatible with a previous study, which found that the prevalence of perinatal depression was 20.4%. It also found that antenatal mothers (10.6%) were slightly prone to perinatal depression as compared to post-natal mothers (9.8%). However, a much higher prevalence of perinatal depression was reported whereby 31.7% of the study population were identified to be at risk of perinatal depression (Ariffin et al., 2014). One of the possible postulated explanations could be due to recruitment of post-natal mothers who just give birth within 24 to 48 hours in the study. This was due to a rapid decline of oestrogen and progesterone levels which occurred within 72 hours of post-delivery and were partly responsible for perinatal depression (Bloch et al., 2003).

To have a good understanding of perinatal depression and be able to recognise the disease is important because it will influence the health seeking behaviour and effort to seek for help (Thorsteinsson et al., 2014).In the current study questionnaire, 19 items were asked about perinatal depression . Interestingly, the majority (76%) of our perinatal women knew that depression is commonly seen during antenatal and post-partum periods. In addition, they were able to identify that medical conditions, such as pregnancy induce hypertension, pre-eclampsia and spontaneous abortion, were associated with perinatal depression. Symptoms of perinatal depression, such as annoyance with partner or other children, feeling a sense of frustration with present life and anxious feeling towards the baby, were also recognised by 68% of perinatal women in this study. However, the study found that the perinatal women underestimated the prevalence and magnitude of perinatal depression in Malaysia. This was hypothesised that it could be because the perinatal depression in Malaysian context are still not well recognised and received less attention as compared to other chronic diseases like diabetes and hypertension.

The previous study revealed that knowledge of perinatal depression was found to be important for women to reduce the risk of getting depression (Fonseca et al., 2015). In contrast, there was no association between knowledge score and the risk of perinatal depression. The result was in good agreement with Buist et al. (2017) who found that the risk of perinatal depression did not reduce even though the knowledge score was increased. The study also recognised that women were not able to identify the symptoms as depression even though they participated in the screening programme. Moreover, the present study did not find any significant association between awareness of perinatal depression and the risk of getting the disease. However, the previous study found a significant association between awareness and the risk of getting depression (Henshaw et al., 2013). The finding was in contrast with the present study, whereby it could be due to the stages of participants who were recruited in the study. The previous study only enrolled pregnant women who were at their third trimester and two months of postnatal. The present study had used a much longer period which was up to one year of post-natal. This might influence the different study outcomes.
In this study was a significant positive relation found between knowledge and awareness of depression during the perinatal period. The previous study also reported the importance of knowledge in order to increase perinatal depression awareness (Park et al., 2015). A study by Highet NJ et al. (2011) highlighted the importance of education which needed to be improved to increase perinatal knowledge even though the awareness was good. Therefore, knowledge and awareness about depression in antenatal and postnatal period are important to reduce the number of perinatal depression.

CONCLUSION

This study emphasises that knowledge and awareness of perinatal depression are important to reduce the number of perinatal depression. Practically health care providers such as nurses, doctors or midwife play a crucial role as a holistic health care provider. The role of health care providers as an educator should be emphasised in order to facilitate and enhance knowledge, as well as creating more awareness on perinatal depression among perinatal women. This study also provides an idea on the current knowledge gap in perinatal depression among perinatal women and may assist health care providers to fill the gap by providing effective educational delivery to patients. Education on depression among women during pregnancy and after childbirth are needed to enhance knowledge on perinatal depression including the risk factors, symptoms and treatment

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