

Knowledge and Practice of Third Year Degree Nursing Students Regarding Postpartum Depression at a University: Windhoek, Namibia.

Joseph Galukeni Joseph Kadhila (✉ jkadhila@unam.na)

University of Namibia

Winnie Rauha Moongo

University of Namibia

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Abstract

Postpartum depressions (PPD) are common, affecting at least 10% of mothers. PPD is a common illness, the global prevalence being 10–15%. The prevention, detection and treatment of postpartum depression (PPD) are of great importance because PPD without care may cause many problems. Postpartum depressions are serious because of their impact on mother-baby relationships and on the Childs' Development. However, these depressions seem very insufficiently diagnosed and treated.

Methodology: In this study a quantitative descriptive research design was adopted. Descriptive research design is useful as it helps to obtain information that describes the existing phenomena by asking individuals about their perceptions, attitudes and values. The design reports things the way they are. In this regard, the descriptive research design was used to achieve the main objective of the study which is to assess the knowledge and practice of third year degree nursing students at a University, Windhoek Namibia, regarding postpartum depression.

Result: Participant have good knowledge on, knowledge and practice regarding postpartum depression. An analysis of student's knowledge about whether physical stress can predispose a woman to PPD revealed that clearly more than half of participants (89.6%, n = 60) agreed, while only 9.0% (n = 6) of the participants chosen neutral and 1.5%(n = 1) disagreed that physical stress can predisposes a woman to PPD.

Conclusion: Descriptive analysis was conducted to compare the knowledge of study participants on postpartum depression. In addition, it shows that only few students who's disagreed that smoking can predispose woman to PPD. The study revealed that the majority of the participant agreed that physical stress can predispose a woman to PPD. Overall, the study results revealed that above average of the 3rd year nursing students has good knowledge on postpartum depression.

Introduction

Most moms experience postpartum depression (PPD), which affects at least 10% of them (Serhan et al., 2013). PPD is a condition that affects 10-15% of people worldwide. Postpartum depression (PPD) must be prevented, identified, and treated because it can lead to a variety of issues if left untreated. Consequences include altered emotional and social contact between the infant and mother, insecure attachment, and detrimental effects on the child's emotional, cognitive, social, and physical development that are said to last until adolescence. However, it appears that these depressions are not appropriately detected and treated: according to some research, approximately a third of moms with confirmed depression did not receive a diagnosis from their general practitioner or other treating healthcare experts. Postpartum depression can be considered as a public health problem, not only because of its frequency but also because of its harmful consequences on the newborn, on the conjugal relationship, or even on the family balance. Especially, since it can announce the beginning of a chronic pathology of the mood in

the mother. Hence the need for its prevention by action on risk factors, its screening, and its multidisciplinary therapeutic management.

Background

The immediate postpartum period consists of the first twenty-four hours after delivery. Early postpartum starts between the second days after birth until the end of the first week. The postpartum period continues until six weeks or even six months after birth (Romano et al., 2014).

Evidence, however, indicates that postpartum depression is frequently missed and incorrectly diagnosed, and the most vulnerable women are rarely identified during pregnancy or after delivery, preventing them from always receiving the essential care (Babatunde, 2010). One may develop postpartum depression if they have these symptoms for longer than two weeks during or after pregnancy, or if they believe they don't love or care for their child (Ashaba et al., 2015). This typically occurs when a person is depressed, despairing, and overwhelmed, sobbing a lot, thinking about hurting the baby or themselves, lacking interest in the baby, feeling disconnected from the baby, or thinking that their kid is someone else's baby (Albert, 2015). It is possible to identify women with increased risk factors for postpartum depression, but the unacceptably low positive predictive values of all currently available antenatal screening tools make it difficult to recommend them for routine care.

Literature states that postpartum depression is a debilitating mental disorder with prevalence between 5% and 60.8% worldwide (Klainin & Arthur, 2019). The intensity of feeling inability in suffering mothers is so high that some mothers with postpartum depression comment life as the death swamp Beck et al., (2006) while non-depressed mothers see their baby's birth as the happiest stage of their life (Corwin et al., 2017). The disease manifests as sleep disorders, mood swings, changes in appetite, fear of injury, serious concerns about the baby, much sadness and crying, sense of doubt, difficulty in concentrating, lack of interest in daily activities, thoughts of death and suicide (Norhayati et al., 2015).

Furthermore, problems including insufficient attachment to the newborn (34%) and fear of injuring the baby (36%) as well as, in severe situations, child suicide attempts have been observed (Thorsteinsson et al., 2014). These symptoms seriously impact the health of the family (Mathisen et al., 2013). Therefore, in order to provide the necessary care, it is necessary to identify sensitive individuals prior to delivery. However, the design of screening programs and evidence-based prevention initiatives necessitate the careful gathering of scientific data. However, systematic reviews were seen in the analysis of some papers that were accessible and evaluated the resources in describing the therapeutic effects of selective serotonin reuptake inhibitors on postpartum depression and cognitive behavioural therapies (De Crescenzo et al., 2014). (Nardi et al., 2012). Review studies that only address the biological and psychological components appear to be insufficient; in order to gain enough knowledge to develop screening and prevention programs, all the factors related with postpartum depression must be assessed collectively. The purpose of this study is to evaluate nursing students' understanding of postpartum depression and its risk factors before, during, and after pregnancy.

Aim

The aim of the study was to assess the knowledge and practice of third year degree nursing students regarding postpartum depression at a University, Windhoek, Namibia.

Method

The study adopted a descriptive research design. Descriptive research design is useful as it helps to obtain information that describes the existing phenomena by asking individuals about their perceptions, attitudes and values. The design reports things the way they are. In this regard, the descriptive research design was used to achieve the main objective of the study which is to assess the knowledge and practice of third year degree nursing students of a University, Windhoek, Namibia, regarding postpartum depression. This study used the quantitative approach. Quantitative approach is the mathematical method of measuring and describing the observation of materials or characteristics. Therefore, quantitative approach was used so as to collect numerical data from the respondents.

Quantitative research method is descriptive research that is the collection and analysis of primary information. This research method is aimed at obtaining accurate statistical data. The main advantage of quantitative methods is the coverage of a large number of respondents (Queirós et al., 2017).

Survey

The study applied the use of the primary data collection technique. The responses were achieved through a structured self-administered questionnaire. A specific questionnaire was designed for the purpose of this study to collect data on women's characteristics and potential risk factors and in English. According to Cohen, Manion, and Keith (2011), questionnaires are reliable because they encourage honesty due to anonymity. The questionnaire was English, straightforward and it is divided in sections. Section A was demographic data that include, gender, age, nationality, higher qualification obtained a marital status. Section B was on the knowledge and practice of the 3rd year nursing students regarding postpartum depression.

Ethical approval

Ethical clearance was obtained through the structures of the University of Namibia. Therefore, the following ethical considerations were written, informed consent was obtained from each participant after the procedure was explained and risks were pointed out after adequate information were conveyed, possible risks were pointed out. Voluntary participation without penalty for withdrawal was pointed out.

Data collection

The researcher sought permission from the Head of the University of Namibia to collect data from the 3rd year nursing students, once permission was granted, each respondent signed a consent form and the researcher ensured that all ethical procedures were followed. Questionnaires were distributed by the

researcher at the University of Namibia main campus and some at the clinical practice, depending on the allocation. Data was collected as from the 1st of August to the 14th August 2022. The researcher collected the questionnaire after participants have completed.

Data analysis Results

Data analysis help to make sense of large numbers of individual responses to communicate the essence of those responses to others, they also aid in summarizing the results, (Brink et al, 2018). The Statistical Package for Social Science (SPSS), software version 26.0 was used to analyze data. Descriptive statistics was used for summarizing the study and outcome variables. They make simple summaries about the sample and the measures. Descriptive statistics such as frequency, percentage, mean and standard deviation was used. The study used the following variables including general nurse knowledge of postpartum depression such as, symptoms of postpartum depression, risk factors of postpartum depression, complications and treatments of postpartum depression. Data were presented into bar graphs and a line graph so that it makes sense, after all an experienced statistician was consulted to help with data analysis.

Demographic information

Participant’s age

Participants were asked to indicate their age in the questionnaires as part of the demographic data obtained.

Table 1: Distribution of respondents by age

	N	Minimum	Maximum	Mean	Standard deviation	Variance
Participants Age	67	19	49	24.67	6.568	43.133

As depicted the minimum rate of age was 19 years, maximum was 49 years old and the mean is 24.67. Participant’s ages were scored and added into a range form which has put the age into categories. The results are presented in the table 1 above.

Figure 1: above show that the bigger percentage (64.2%) of the participants were between the age group of 18 and 22 years old, followed by 16.4% between the ages of 23 and 27 years; 7.5% of the participants fell between 33 and 37 years, and 4.5% was between the ages 28 and 32, and below 43 years old respectively. Only 3% of the participants were above the age of 38 and 42 years old.

As seen in figure 2, majority if the participants in the study were female with 91% of the total population and male were 9% of the total population. This means the majority of the participants who were willing to take part and explore their Knowledge and practice regarding postpartum depression were female.

Table 2: Participants' knowledge on postpartum depression

Variable: Risk factors	Agree	Neutral	Disagree
Smoking predisposes a woman to PPD	24(35.8%)	31(46.3%)	12(17.9%)
Physical stress can predispose a woman to PPD	60(89.6%)	6(9.0%)	1(1.5%)
Genetic makeup can predispose to PPD	21(31.3%)	32(47.8%)	14(20.9%)
Age of the mother is a risk factor for PPD	51(76.1%)	11(16.4%)	5(7.5%)
Previous history of depression can result in PPD	49(73.1%)	15(22.4)	3(4.5%)
Family history of depression can predispose PPD	34(50.7%)	24(35.8%)	9(13.4%)
Poor economic status can result in PPD	52(77.6%)	8(11.9%)	7(10.5%)
Unplanned and unwanted pregnancy contribute to PPD	57(85.1%)	5 (7.5%)	5(7.5%)
Prenatal anxiety is a risk factor associated with PPD	53(79.1%)	12(17.9%)	2(3.0%)

Variable 1

Table 2 shows the data regarding the respondent's knowledge on risk factors on postpartum depression that were collected from 67, 3rd year nursing students from the University of Namibia main campus. The first variable on risk factors, 46.3% (n=31) of the participants had chosen neutral, 35.8 (n=24) of the participants had agreed and 17.9% (n=12) of the participants had disagreed that smoking predisposes a woman to postpartum depression.

Variable 2

On the second variable, 89.6(n=60) of the participants had indicated that they agreed that physical stress is one of the risk factors of postpartum depression, while 9.0% (n=6) of the participants had chosen neutral and 1.5% (n=1) of the participant had disagreed.

Variable 3

Moreover, 47.8(n=32) of the participants had chosen neutral, 31.3(n=21) of the participants had chosen neutral and 20.9% (n=14) of the participant had disagreed that genetic makeup can predispose to postpartum depression.

Variable 4

Moving on to the fourth variable, 76.1(n=51) of the participants had agreed that age of the mother is one of the risk factors of postpartum depression, while 16.4% (n=11) of the participants had chosen neutral

and 7.5% (n=5) of the participant had disagreed.

Variable 5

Furthermore, 73.1(n=49) of the participants had agreed that previous history of depression can result in postpartum depression. On the other hand, 22.4% (n=15) of the participants had chosen neutral and 4.5% (n=3) of the participant had disagreed previous history of depression can result in postpartum depression.

Variable 6

On the sixth variable, 50.7% (n=34) of the participants had agreed to that family history of depression can predispose postpartum depression, 35.8% (n=24) of the participants had chosen neutral and 13.4% (n=9) of the participant had disagreed.

Variable 7

Moreover, 77.6(n=52) of the participants had agreed to that poor economic status can result in postpartum depression. On the other hand, 11.9% (n=8) of the participants had chosen neutral and 10.5% (n=7) of the participant had disagreed to that poor economic status can result in postpartum depression.

Variable 8

In addition, 85.1(n=52) of the participants had indicated that they agree that unplanned and unwanted pregnancy contribute to postpartum depression, 7.5% (n=5) of the participants had chosen neutral and 7.5% (n=5) of the participant had disagreed to that unplanned and unwanted pregnancy contribute to postpartum depression.

Variable 9

Final variable, 79.1 %(n=53) of the participants had indicated that they agree that prenatal anxiety is a risk factor associated with postpartum depression. Also, 17.9% (n=12) of the participants had chosen neutral and 3.0% (n=2) of the participant had disagreed to that prenatal anxiety is a risk factor associated with postpartum depression.

Table 3: Overall student's Knowledge on the PPD

	True	False
Psychological morbidity, specifically depression and anxiety, are commonly seen in both the antenatal and postpartum periods	61(91.0%)	6(9.0%)
Lack of support from healthcare providers can cause postpartum depression	59(88.1%)	8(12.0%)
Frequent mood swings are one of the requirements for diagnosis of postpartum depression	60(89.6%)	7(10.4%)
It is not essential to screen for and differentiate between depression and anxiety comorbidity in pregnant women	9(13.4%)	58(86.6%)
Psychological morbidity, such as depression and anxiety, is not associated with drug and alcohol abuse	15(22.4%)	52(77.6%)
Postpartum depression most commonly occurs within 10 to 14 days after birth	54(80.6%)	13(19.4%)
Preeclampsia is associated with depression during pregnancy	41(61.2%)	25(37.3%)
Mothers may be able to breastfeed while taking antidepressants medication	52(77.6%)	15(22.4%)
Annoying with your partner or other children symptom of postpartum depression	51(76.1%)	16(23.9%)

Variable 1

On this statement, participants were asked to indicate their view on this statement: 'psychological morbidity, specifically depression and anxiety, are commonly seen in both the antenatal and postpartum periods'; whereby 91.0% (n=61) of the participants chosen true and 9.0% (n=6) of the participant chosen false.

Variable 2

On this statement, 88.1% (n=59) of the participants chosen true and 12.0% (n=8) of the participants chosen false as their responded to the statement 'Lack of support from healthcare providers can cause postpartum depression'.

Variable 3

On this statement, 89.6% (n=60) of the participants chosen true 'frequent mood swings is one of the requirements for diagnosis of postpartum depression. Moreover, 10.4% (n=7) of the participants chosen false.

Variable 4

On this statement, a small number 13.4% (n=9) of the participants in the study chosen true, while 86.6% (n=58) of the participants chosen false to 'it is not essential to screen for and differentiate between depression and anxiety comorbidity in pregnant women'.

Variable 5

On this statement, 22.4% (n=15) of the participants in the study chosen true to 'psychological morbidity, such as depression and anxiety, is not associated with drug and alcohol abuse'. However, 77.6% (n=52) of the participants in the study chosen false.

Variable 6

On this statement, more than half (80.6%, n=54) of the participants in the study chosen true, while 19.4% (n=13) of the participants chosen false to 'Postpartum depression most commonly occurs within 10 to 14 days after birth'.

Variable 7

On this statement, 61.2% (n=9) of the participants in the study chosen true and 37.3% (n=25) of the participants chosen false to 'preeclampsia is associated with depression during pregnancy'.

Variable 8

On this statement, 77.6% (n=52) of the participants in the study chosen true to 'mothers may be able to breastfeed while taking antidepressants medication. Moreover, 22.4% (n=15) of the participants in the study chosen false.

Variable 9

On this statement, 76.1% (n=51) of the participants in the study chosen true to 'annoying with your partner or other children symptom of postpartum depression; while 23.9% (n=16) of the participants in the study chosen false.

Discussion

Demographic data

The demographic characteristics of the participants in this study are presented in Table 1. The study results reveal that majority of the participants (64.2%) were between the ages of 18 - 22 years. The result shows that the female participant dominated in this study. It also shows that, 91.0 % (n=61) of the participants were female, while 9 % (n=6) were male.

STUDENTS KNOWLEDGE ON THE RISK FACTORS OF POSTPARTUM DEPRESSION

The study analyzed of student's knowledge on the risk factor postpartum depression. It revealed that more 46.3% (n=31) chose neutral as they respond to whether they see smoking predisposes a woman to PPD, 35.8 %(n=24) of the student agreed and 17.9 %(n=12) disagreed that smoking predisposes a woman to PPD, table 3. According to the finding of the study conducted by Adeleke et al (2016) shows that 78.1 (89) of the participants disagreed to that smoking predisposes a woman to PPD and only 21.9% (25) of the participants agreed to that smoking predisposes a woman to PPD.

An analysis of student's knowledge about whether physical stress can predispose a woman to PPD revealed that clearly more than half of participants (89.6%, n=60) agreed, while only 9.0% (n=6) of the participants chosen neutral and 1.5%(n=1) disagreed that physical stress can predisposes a woman to PPD. According to the study carried out by Grote and Bledsoe (2007) revealed that high level of physical stress significantly causes an increase in depression signs at six months postpartum. The study findings suggested that optimism in woman during pregnancy can reduce depressive symptoms and severity of postpartum depression within the period of six to twelve months after birth.

The study revealed that 47.8% (n=32) of the participants choose neutral as the responses to whether genetic makeup can predispose woman to PPD. In addition, 31.3% (n=21) of the participants agreed to that genetic makeup can predispose woman to PPD and 20.9% (n=14) of the participants disagreed to that genetic makeup can predispose woman to PPD. The finding of the study conducted by Adeleke et al., (2016) shows that 97.4% (111) of the participants disagreed to that genetic makeup can predispose woman to PPD and only 2.6% (3) of the participants agreed to that genetic makeup can predispose woman to PPD.

Regarding whether the participants sees the age of the mother as the risk factor for PPD, 76.1% (n=51) of the participants agreed, 16.4% (n=11) of the participants choose neutral and 7.5% (n=5) of the participants disagreed that age of the mother is the risk factor of PPD. According to Shitu *et al.*, (2019) study results shows that socio-demographic factors like age, educational status, occupation and economic status of the mother were not significantly associated with PPD.

The study result shows that 73.1% (n=49) of the participant agreed that previous history of depression can result in PP, while 22.4% (n=15) of the participants selected neutral to whether previous history of depression can result in PPD and 4.5% (n=3) of the participants disagreed that previous history of depression can result in PPD. Similar study do by Kettunen *et al* (2014), revealed that 85.2% (n=23) of depressed mothers had a previous history of postpartum depression and only 14.8% (n=4) of depressed mothers did not have previous history of postpartum depression.

The study revealed that 50.7% (n=34) of the participant agreed that family history of depression can predispose PPD, while 35.8% (n=24) of the participants selected neutral and 13.4% (n=9) of the participants disagreed that family history of depression can predispose PPD. The finding of similarly, shows that 58% of mothers, indicated that they had no family history of generalized anxiety disorder or major postpartum depression and 42% of mothers (42%), indicated that they had family history of generalized anxiety disorder or major postpartum depression (Amy, 2016) .

Regarding whether the participants sees poor economic status can result to PPD, 77.6% (n=52) of the participants agreed, 11.9% (n=8) of the participants chosen neutral and 10.5% (n=7) of the participants disagreed that poor economic status can result to PPD. These is in contrast with the findings of the study done by Adeleke et al., (2016), which showed that 68.4% (78) of the participants disagreed to that poor economic status can result to PPD and only 31.6% (36) of the participants agreed to that poor economic status can result to PPD.

Study results revealed that 85.1% (n=57) of the participant agreed that unplanned and unwanted pregnancy contribute to PPD, while 7.5% (n=5) of the participants selected neutral and 7.5% (n=5) of the participants disagreed that unplanned and unwanted pregnancy contribute to PPD. However, this was different from study conducted by Adeleke *et al* (2016) revealed that majority of the participants indicated that unplanned and unwanted pregnancy is not a risk factor for postpartum depression.

The study revealed that 79.1% (n=53) of the participants agreed that prenatal anxiety is a risk factor associated with PPD. In addition, 17.9% (n=12) of the participants were neutral on whether prenatal anxiety is a risk factor associated with PPD and 3.0% (n=2) of the participants disagreed to that prenatal anxiety is a risk factor associated with PPD. The finding of the study conducted by Adeleke et al (2016) revealed that 78.1% (89) of the participants disagreed to that prenatal anxiety is a risk factor associated with PPD and only 21.9% (25) of the participants agreed to that prenatal anxiety is a risk factor associated with PPD.

OVERALL STUDENT'S KNOWLEDGE ON POSTPARTUM DEPRESSION

Psychological morbidity, specifically depression and anxiety, are commonly seen in both the antenatal and postpartum periods

On this statement, were asked to indicate their view on this statement: 'psychological morbidity, specifically depression and anxiety, are commonly seen in both the antenatal and postpartum periods'; whereby 91.0% (n=61) of the participants chosen true and 9.0% (n=6) of the participant chosen false. More research has emphasized on mental health issue among women during postnatal period compared to mental health issue among women during antenatal period. According to existing research, an estimate of 12% – 16% of women experience postpartum depression. Depression and anxiety of postpartum can be categorized as acute or chronic from the beginning. Similarly, antenatal distress and postnatal distress are said to be related to numerous psychosocial risk factors (Satyanarayana, Lukose, & Srinivasan, 2011) .

Lack of support from healthcare providers can cause postpartum depression

On this statement, 88.1% (n=59) of the participants chosen true and 12.0% (n=8) of the participants chosen false as their response to the statement 'Lack of support from healthcare providers can cause postpartum depression'. According to Who-UNFPA (2008), the attitudes and behaviours of the healthcare providers are of ultimate vital in promoting woman's mental health during childbirth and mental health in

general. Insufficient of social support can cause postpartum depression. Development of postpartum depression in woman may be also caused by other factor such as domestic violence in the form of spouse sexual and physical and verbal abuse. In addition, smoking during pregnancy is a risk factor for developing postpartum depression (Mughal, Azhar, & Siddiqui, 2022) .

Frequent mood swings are one of the requirements for diagnosis of postpartum depression

On this statement, 89.6% (n=60) of the participants chosen true 'frequent mood swings are one of the requirements for diagnosis of postpartum depression. Moreover, 10.4% (n=7) of the participants chosen false. According to Li *et al.* (2021) study findings mood swings, depression, and anxiety were not found to be risk factors for adverse neonatal outcomes in a country with well-developed welfare systems.

It is not essential to screen for and differentiate between depression and anxiety comorbidity in pregnant women

On this statement, a small number 13.4% (n=9) of the participants in the study chosen true, while 86.6% (n=58) of the participants chosen false to 'it is not essential to screen for and differentiate between depression and anxiety comorbidity in pregnant women'. According to Schetter & Tanner (2012) , in any attempt to screen for and treat depression, anxiety, pregnancy anxiety, or stress in pregnancy, these levels of influence must be considered. For example, involving a woman's partner, closest relative, or friend in follow-up after screening may help her understand or respond to a diagnosis of a mood or anxiety disorder and accept treatment. Because of their beliefs, values, and level of information, families and communities can undermine or enhance efforts to screen and treat pregnant women.

Psychological morbidity, such as depression and anxiety, is not associated with drug and alcohol abuse

On this statement, 22.4% (n=15) of the participants in the study chosen true to 'psychological morbidity, such as depression and anxiety, is not associated with drug and alcohol abuse'. However, 77.6% (n=52) of the participants in the study chosen false. The study findings by Mohamed *et al.* (2020) revealed that majority of the sample for people who use drugs had higher level of depression compared the non-drug users. Also, approximately two thirds of the drug users had high level of anxiety. The study findings showed that there is a positive relationship between substance-related use problems and, depression and anxiety. According to Dr. Cornah (2006) , alcohol is associated with a variety of psychological morbidity, such as depression and anxiety.

Postpartum depression most commonly occurs within 10 to 14 days after birth

On this statement, more than half (80.6%, n=54) of the participants in the study chosen true, while 19.4% (n=13) of the participants chosen false to 'Postpartum depression most commonly occurs within 10 to 14 days after birth'. According to the study carried by WHO-UNFPA (2008) , among large number of women with postnatal depression, their symptoms of postpartum depression last at least for a year. According to a reviewed study, it showed that an estimate of about 30% of women with postnatal depression, symptoms continued for up to a year after giving birth.

Preeclampsia is associated with depression during pregnancy

On this statement, 61.2% (n=9) of the participants in the study chosen true and 37.3% (n=25) of the participants chosen false to 'preeclampsia is associated with depression during pregnancy'. According to Mbarak *et al* (2019), postpartum depression is present in one out of five women with pre-eclampsia or eclampsia and the level increased with the severity of the sickness condition. To tackle postpartum depression, efforts ought to be achieved to display screen and grant cure to pregnant woman dealing with pre-eclampsia or eclampsia. The extent of postpartum depression among women with preeclampsia and eclampsia was found increase by 20.5% with the severity of hypertension in pregnancy. When pre-eclampsia or eclampsia detected in younger women, they said to be more likely to suffer from PPD compared to older women.

Mothers may be able to breastfeed while taking antidepressants medication

On this statement, 77.6% (n=52) of the participants in the study chosen true to 'mothers may be able to breastfeed while taking antidepressants medication. Moreover, 22.4% (n=15) of the participants in the study chosen false. The study conducted by Burt *et al* (2001) stated that, woman with postpartum depression are often in confusion whether to take antidepressants medication and continue or stop breastfeed their infant. It is vital to protect the mother's mental health and at the same time optimizing the well-being of the infant, both mentally and physically. Instead of basing the decision of the medication use on the level of serum, the uses of antidepressants by nursing mothers is acceptable as long as the nursing mother closely monitor the clinical status of infants breastfed.

Annoying with your partner or other children symptom of postpartum depression

On this statement, 76.1% (n=51) of the participants in the study chosen true to 'annoying with your partner or other children symptom of postpartum depression; while 23.9% (n=16) of the participants in the study chosen false. The findings of review done by Ou & Hall (2018) suggested that women's postnatal depression can be coexist with anger. Anger can be directed at oneself as well as at children and family members, which can have a negative impact on relationships.

Limitations

This study was conducted on the 3rd year nursing students from the University of Namibia main campus. The limitations of the study are those characteristics of design or methodology that impacted or influenced the interpretation of the findings from your research (Brutus et al., 2020). Another limiting factor was time, as the students did not have adequate time to participate which hampered the data collection process. The health research committee took long to approve the project hence delaying the researcher to conclude on time. There were some financial constraints to the study because the researcher being a student herself did not have enough funds to print out the questionnaires and also transport fare to reach the participants during data collection period as they were at different health facilities. Moreover, the lack of prior research studies on the topic in Namibia was also a limitation of this

study. Additionally, other limitations were that it relied solely on a time point of assessment. For this reason, the results cannot be applied to the entire population of medicine students. The current study's results should not be interpreted subjectively, but they may inform future research on assessing women's postpartum depression knowledge. Future studies can explore more on students' knowledge on how to care for postpartum depression patients and on proper management postpartum depression.

Conclusion

This study examined the knowledge of 3rd year nursing students regarding postpartum depression. Participants were asked to indicate their agreement with the statements on a three-point Likert scale ranging from 1=agree, 2=neutral and 3=disagree, regarding the risk factor of postpartum depression. Descriptive analysis was conducted to compare the knowledge of study participants on postpartum depression. In addition, it shows that only few students who's disagreed that smoking can predispose woman to PPD. The study revealed that the majority of the participant agreed that physical stress can predispose a woman to PPD. Overall, the study results revealed that above average of the 3rd year nursing students have good knowledge on postpartum depression.

Declarations

Ethics approval and consent to participate

Written informed consent was obtained from the participants prior to data collection to partake in this study. Ethical clearance was obtained from the School of Nursing and Public Health at the University of Namibia research ethics committee to conduct the study. The following ethical principles, respect for a person, justice, maleficence and beneficence where adhered and respected throughout the study according to guidelines.

Consent for publication

Not applicable

Availability of data materials

Data base is available on a reasonable request from the corresponding author Joseph Galukeni Kadhila.

Competing interest

The authors declared no conflict of interest.

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No funding was done for this work.

Authors' contributions

1. Wienie Rauha Moongo was responsible for preparing the original draft and writing: 2. *Joseph Galukeni Kadhila was responsible for the supervision and editing of manuscript.

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Author details

1. Winnie Moongo University of Namibia, Windhoek; 2. *Joseph Galukeni Kadhila, School of Nursing and Public Health, Faculty of Health Sciences and Veterinary Medicine, University of Namibia.

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