

Nurses' Knowledge, Attitudes, and Practices regarding perinatal bereavement care in Malaysia: A Cross-sectional Study

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Received: 01 Aug 2023; Accepted: 08 Sep 2023; Published: 15 Sep 2023

Citation: Kiu L.T., Ahmad A, Annamma K, et al. Nurses' Knowledge, Attitudes, and Practices regarding perinatal bereavement care in Malaysia: A Cross-sectional Study. *Gynecol Reprod Health*. 2023; 7(5): 1-9.

ABSTRACT

Background: Perinatal bereavement occurs when a parent experiences the loss of a baby during pregnancy or shortly after birth. Coping with this loss can be incredibly challenging and emotionally taxing for the parents involved. They often have complex and intense emotional and psychosocial needs to navigate during this difficult time.

Objective: This study aimed to investigate nurses' knowledge, attitudes, and practices regarding perinatal bereavement care (PBC) and its correlation with their selected sociodemographic factors.

Methods: In 2021, a cross-sectional descriptive study was conducted utilising a structured questionnaire for data collection. A total of 182 nurses were sampled conveniently, comprising 45 registered nurses, 124 registered midwives, and 13 community nurses. The data was subjected to descriptive statistical analysis using IBM SPSS Version 28.0.

Results: The finding shows that 67% had a poor understanding of perinatal bereavement. However, the majority (85.2%) had positive attitudes towards providing care for those affected by perinatal bereavement, and 58.8% displayed favourable care behaviour. The results also indicated that nurses who had experience working with grieving parents had a higher level of knowledge regarding perinatal bereavement care ($p < 0.005$). Additionally, the study found that nurses who had been working in the field for longer had more positive attitudes toward bereavement care ($p < 0.05$). Furthermore, the practices of perinatal bereavement care were found to be related to work designation and qualifications ($p < 0.05$).

Conclusion: It is recommended that perinatal bereavement care education be included in undergraduate healthcare education, postgraduate education, and Continuing Professional Education (CPE) workshops. Evidence-based policies and protocols on perinatal bereavement care are also recommended to support parents and family members during their experience of bereavement.

Keywords

Perinatal bereavement care, Bereavement, Perinatal death, Stillbirth, Perinatal mortality.

Introduction

Perinatal loss is a term that encompasses the loss of pregnancy before 20 weeks gestation (miscarriage), death from 20 weeks

gestation with a weight over 500g (stillbirth), and loss up to 28 days after birth (neonatal death), as defined by Barfield [1]. According to the World Health Organization [2], the global newborn mortality rate in 2020 was approximately 2.4 million. In Malaysia, the perinatal mortality rate in 2021 was 8.2 deaths per 1,000 births, as Statista Research Department [3] reported. These statistics indicate a significant incidence of perinatal loss, necessitating all

nurses' care provision to affected women, including those outside the Obstetrics and Gynaecology department.

Perinatal loss is a distressing and unexpected event for parents and healthcare professionals. Perinatal loss can elicit various emotional reactions, including frustration, rage, denial, and detachment from the world [4,5]. Each individual's grief experience is unique, and providing consistent and high-quality bereavement care requires nurses to possess extensive knowledge, skills, and sensitivity. Without adequate knowledge, confidence, and organisational support, the emotional, psychosocial, and spiritual support services can be overwhelming and emotionally taxing.

When caring for women who have lost a loved one, it is important to provide holistic support. This can help ease traumatic reactions in parents during the grieving process [6]. Effective communication with patients, using appropriate language and timing, is essential for providing adequate bereavement care [7].

It is important to evaluate the quality of care provided for perinatal bereavement. However, research on knowledge, attitudes, and practices related to perinatal bereavement care is limited. Only two studies have been conducted on knowledge and attitudes towards this care [8,9]. Other studies have focused on experiences of the parents [10,11], attitudes, beliefs, and practices [12], or attitudes and stress related to perinatal bereavement care [13].

Malaysian Nursing Context

In Malaysia, individuals holding valid Annual Practicing Certificates issued by the Nursing Board Malaysia are recognized as registered nurses [14]. These professionals are authorized to work in perinatal units, but to work in the labour room, one must be a registered midwife. Registered midwives, on the other hand, must hold both a Registered Nurse license and a registered midwife certificate from the Midwifery Board Malaysia [2]. Additionally, any registered nurse holding a registered midwife certificate is eligible to serve as a community health nurse. Notably, in Malaysia, having a midwifery background is a critical requirement for being a community health nurse.

It is worth noting that, despite nursing programs covering bereavement care, perinatal bereavement education is not included in certificate, diploma, bachelor's degree, or post-graduate programs for Obstetric nursing. Nonetheless, knowledge of perinatal bereavement is vitally important for healthcare professionals, particularly registered nurses, in order to provide effective support to parents and families who have experienced perinatal bereavement loss and to guide them through the bereavement process.

In Malaysia, only two studies have been conducted thus far that have explored issues related to perinatal loss. The first study, undertaken by Sutan et al. in 2010, examined the psychosocial impact of perinatal loss on mothers and the factors contributing to it. The second study, conducted by Sutan and Miskam in 2012,

focused on the psychosocial impact of perinatal loss among Muslim women. However, to date, there has been no additional research conducted to investigate the knowledge, attitudes, and practices of Registered nurses in Malaysia regarding perinatal bereavement care.

There is a gap in research on how sociodemographic profiles affect the knowledge, attitudes, and practices of registered nurses in Malaysia and globally. Montero et al. [10] suggest that healthcare professionals may have different attitudes towards perinatal loss due to a lack of understanding and inadequate skills. Conversely, Fristedt et al. [15] found that undergraduate nursing students have less positive attitudes towards end-of-life care compared to experienced registered nurses. Engel & Rempel [12] also discovered that midwives and nurse practitioners exhibit more favourable caring behaviour than registered nurses. Despite extensive literature review, no studies have identified how sociodemographic profiles of registered nurses in Malaysia relate to their knowledge, attitudes, and practices in perinatal bereavement care. This study aims to fill this research gap and provide essential baseline data for future research.

The specific objectives of the study were to:

1. Investigate knowledge, attitudes, and practices of nurses on perinatal bereavement care in Malaysia.
2. Investigate the correlation between knowledge, attitudes, and practices on perinatal bereavement care and selected socio-demographic characteristics of the nurses studied.

Methodology

Study design

A survey was conducted among registered nurses, midwives, and community nurses providing obstetrics services across all KPJ hospitals in Malaysia. The survey utilised a cross-sectional, descriptive, quantitative design to gauge their knowledge, attitudes, and practices concerning perinatal bereavement care.

Setting and participants

To participate in the study, one had to be a registered nurse, registered midwife, or community nurse employed in the Obstetrics and Gynaecology ward or delivery suites, or Emergency department and involved in the perinatal care. Participants were recruited through convenience sampling. The data was collected from 26 private hospitals in West and East Malaysia that provide obstetric services.

Sample size

The researchers calculated the sample size for our study using Krejcie and Morgan's formula, with a known population size of 420 during the data collection period. Based on this calculation, our sample size was 201 nurses. We collected 217 samples, but 35 were excluded as they did not meet the inclusion criteria. These are the samples from health care assistants working in the study settings. The final sample size included 182 respondents.

Measurements

Knowledge levels of perinatal bereavement care

This tool was adopted by Mohamed, Elati, and Zaki [9], reflecting the current literature review on perinatal bereavement and bereavement care concepts. It comprises nine questions related to perinatal bereavement care concepts. The first question defines bereavement care, which includes emotional, psychosocial, and spiritual services. Respondents who can provide at least two of these keywords are considered satisfactory. The remaining questions addressed various aspects of perinatal bereavement care, and all the options provided were accurate statements. Respondents must select at least 60% of the options to be considered satisfactory.

Attitudes toward perinatal bereavement care

This tool was adopted by Mohamed, Elati, and Zaki [9] and the modified version by Moon-Fei Chan. It comprises 16 statements, divided into “the significance of perinatal bereavement care” and “factors affecting perinatal bereavement care”. Each statement was rated on a 5-point Likert scale, ranging from “1=strongly disagree” to “5=strongly agree”. The participant’s attitude can be highly positive or negative depending on their response to the statements. The total score was calculated based on the respondent’s agreement with the statements and converted to a percentage. A total attitude score of >75% is considered highly positive, 50-75% is considered positive, and <50% is considered negative. Mohamed, Elati, and Zaki [9] reported that Cronbach’s alpha was 0.964 and 0.875 for “the importance of perinatal bereavement” and “factors affecting perinatal bereavement care”, respectively. The current study analysed Cronbach’s alpha on pilot data, resulting in 0.805 and 0.899, respectively.

Practices of perinatal bereavement care

This tool, originally developed by Engel and Rempel [12], was designed to address the topic of miscarriage but can also be applied to perinatal bereavement since miscarriage is a type of perinatal loss. It consists of 11 questions grouped into “mobilising support” and “informing the mother.” Participants were asked to rate how often they engaged in these practices using a scale of 1 (never) to 5 (consistently). A mean score of 3.5 or higher indicates positive caregiving behaviour, while a lower score suggests otherwise. Engel and Rempel [12] reported Cronbach’s alpha values of 0.69 and 0.93 for “mobilising support” and “informing the mother,” respectively. Our study’s pilot data analysis revealed Cronbach’s alpha values of 0.878 and 0.945, respectively.

Demographic characteristics

Experts with extensive experience in maternity and child health and emergency departments have validated the demographic profile. This includes age, race, highest education level, designation, years of working experience, marital status, ward speciality, “perinatal bereavement care policy in place,” “personal grieving experience,” “taken courses related to bereavement care,” and “experience in taking care of grieving parents” of the respondent. The variables included in the demographic profile were developed based on previous similar study demographic variables.

Pilot study

One of the KPJ hospitals was chosen to conduct a pilot study, which was excluded from actual data collection. During the pilot study, 27 respondents participated in the survey. Hill [16] recommended that 10-30 participants are adequate for pilot surveys. The reliability of the test was analysed using the pilot data.

Data collection

After obtaining ethical approvals, the data was collected between 26 October 2021 and 24 March 2022. The data collection process was carried out electronically through Google Forms in English, and no translation to Malay was required due to Malaysia’s multilingual nature. The Google form included a cover letter informing participants of the confidentiality and risks of participation and serving as the informed consent form.

Data analysis

To analyse the data, we used IBM SPSS version 28.0. Descriptive statistics such as mean, standard deviation, frequency, and percentage were utilised to assess the demographic profile of the participants as well as their knowledge, attitudes, and practices regarding perinatal bereavement care. To analyse the relationship between knowledge, attitudes, practices, and socio-demographic backgrounds, we used the chi-square test and Spearman’s rank correlation coefficient. Both tests were conducted with a significance level of 0.05.

Results

Demographic Characteristics

Table 1 illustrates the demographic profile of respondents. The average age of the respondents was 36.87± 8.23 years. 61.0% of the participants had post-basic qualifications. 68.1% were registered midwives followed by registered nurses (n=45, 24.7%) and community nurses (n=13, 7.1%). Sixty-two participants (34.1%) had 10-15 years of working experience. 87.4% had a clear policy. 65.9% of the participants had a personal grieving experience. 59.9% of the respondents had not taken any training or courses associated with bereavement care. 71.4% had experience in taking care of grieving parents.

Knowledge of perinatal bereavement care

Table 2 reveals the knowledge level among nurses about the concept of perinatal bereavement. 67.0% had inadequate knowledge. Most of them show the inadequacy of knowledge on factors that affect parents’ experience and cope with their loss (n=126, 69.2%); essential steps to counselling bereaved parents (n=118, 64.8%); risks for complicated grief (n=112, 61.5%); effect of perinatal bereavement on the couple relationship (n=115, 63.2%) and psychological effect of perinatal bereavement on fathers (n=121, 66.5%).

Attitudes toward perinatal bereavement care

Within Table 3, the attitudes of nurses towards perinatal bereavement are displayed. The majority of surveyed nurses

Table 1: Socio-demographic profile of the respondents.

Variables	Frequency	%
Age in years		
20-29	32	17.6
30-39	94	51.6
40-49	39	21.4
50-59	15	8.2
60-69	2	1.1
Mean ± SD	36.87 ± 8.226	
Race		
Chinese	14	7.7
Malay	120	65.9
Indian	22	12.1
Other	26	14.3
Highest qualification level		
Certificate	13	7.1
Diploma	40	22.0
Degree	18	9.9
Master	0	0.0
Post basic	111	61.0
Designation		
State Registered Nurse	45	24.7
State Registered Midwife	124	68.1
State Community Nurse	13	7.1
Years of working experience		
< 1 year	3	1.6
1-3 years	5	2.7
3-5 years	10	5.5
5-10 years	53	29.1
10-15 years	62	34.1
> 15 years	49	26.9
Marital status		
Single	23	12.6
Married	155	85.2
Widow	4	2.2
Ward speciality		
Emergency department	9	4.9
Delivery suite	79	43.4
Obstetrics and Gynaecology ward	50	27.5
Maternity ward	44	24.2
The working department had a clear policy for managing bereavement care in the workplace.		
Yes	159	87.4
No	23	12.6
Personal grieving experience		
Yes	120	65.9
No	62	34.1
Taking training/courses related to bereavement care		
Yes	73	40.1
No	109	59.9
Past experiences in handling grieving parents		
Yes	130	71.4
No	52	28.6

Table 2: Distribution of studied participants according to their knowledge of perinatal bereavement care.

Items	Inadequate		Adequate	
	No.	%	No.	%
Meaning of bereavement care	69	37.9	113	62.1
Factors that might have an impact on how different parents experience and cope with their loss	126	69.2	56	30.8
Basics skills of bereavement counselling	81	44.5	101	55.5
Essential steps to counselling bereaved parents.	118	64.8	64	35.2
Risks for complicated grief	112	61.5	70	38.5
Effect of perinatal bereavement on the couple relationship	115	63.2	67	36.8
The psychological effect of perinatal bereavement on Mothers	81	44.5	101	55.5
The psychological effect of perinatal bereavement on Fathers	121	66.5	61	33.5
Medical needs of mothers after perinatal loss	93	51.1	89	48.9
Total score	122	67.0	60	33.0

Table 3: Attitudes of nurses regarding the importance of perinatal bereavement.

Items	1 No. (%)	2 No. (%)	3 No. (%)	4 No. (%)	5 No. (%)
The caring grief program provides psychological support to the bereaved parents	11 (6.0)	1 (0.5)	8 (4.4)	100(54.9)	62(34.1)
Bereaved parent's feelings and needs should be respected	8(4.4)	3(1.6)	3(1.6)	85(46.7)	83(45.6)
Communication with parents in a clear, sensitive and honest manner	8(4.4)	2(1.1)	5(2.7)	84(46.2)	83(45.6)
Bereaved parents should be given time to grieve	9(4.9)	2(1.1)	6(3.3)	94(51.6)	71(39.0)
All those involved in the care of bereaved parents should be well informed.	8(4.4)	1(0.5)	8(4.4)	96(52.7)	69(37.9)
Bereaved families require professional follow-up to cope with the experience of perinatal loss	8(4.4)	1(0.5)	11(6.0)	109(59.9)	53(29.1)
It is normal for women to experience sadness for six weeks following perinatal loss	10(5.5)	19(10.4)	45(24.7)	86(47.3)	22(12.1)
The grief felt after an early pregnancy loss can equal that felt with any other loss.	13(7.1)	30(16.5)	36(19.8)	80(44.0)	23(12.6)

Table 4: Nurses' Attitudes regarding factors affecting perinatal bereavement care.

Items	1 No. (%)	2 No. (%)	3 No. (%)	4 No. (%)	5 No. (%)
The unit should have a clear policy for the management of perinatal bereavement	8 (4.4)	2 (1.1)	6 (3.3)	119 (65.4)	47 (25.8)
All staff involved should be well informed about the policy	8 (4.4)	1 (0.5)	5 (2.7)	115 (63.2)	53 (29.1)
All staff involved should understand the policy	10 (5.5)	1 (0.5)	4 (2.2)	112 (61.5)	55 (30.2)
All staff should join a training program on bereavement care	10 (5.5)	0 (0.0)	14 (7.7)	106 (58.2)	52 (28.6)
All staff should participate in bereavement care	9 (4.9)	1 (0.5)	11 (6.0)	113 (62.1)	48 (26.4)
All staff should share the experience with colleagues and work as a team while caring for bereaved parents	10 (5.5)	2 (1.1)	13 (7.1)	115 (63.2)	42 (23.1)
All staff should seek support when experiencing 'burnout.'	8 (4.4)	0 (0.0)	8 (4.4)	103 (56.6)	63 (34.6)
Proper training should be provided for all staff to participate in bereavement care	9 (4.9)	0 (0.0)	11 (6.0)	103 (56.6)	59 (32.4)
Total attitude score	Negative No (%) 9(4.9)			Positive No (%) 18(9.9)	High Positive No (%) 155(85.2)

Table 5: Means response rating for each behaviour and mean score distribution among participants.

Behaviour	Mean (Standard Deviation)
Mobilise support	
If the woman desires, include the partner in the discussion about the loss.	3.8 (1.022)
Verify with the woman that someone is available for support during and following the loss.	3.84 (0.864)
Verify with the partner that someone is available for support during and following the loss.	3.83 (0.847)
Offer a referral to another healthcare provider (for example, a specialist?)	3.44 (0.983)
Inform mother	
Provide information on what to expect next regarding expelling the product of conception.	3.41 (0.986)
Guide what to do with the expelled product of conception.	3.44 (0.988)
Provide information on what to expect next regarding the mother's physical health following a perinatal loss.	3.68 (0.852)
Guide as to emotional response that might be expected following loss?	3.81 (0.813)
Guide on coping with the emotional responses of perinatal bereavement.	3.79 (0.808)
Provide information regarding potential causes of perinatal loss.	3.41 (0.946)
Provide information about when to conceive again.	3.41 (0.975)
Mean score (μ)	$\mu < 3.5$ No (%) 75 (41.2)
	$\mu \geq 3.5$ No (%) 107 (58.8)

agreed with the following statements: "The caring grief program should offer psychological support to the bereaved parents" (n=100, 54.9%), "bereaved parents should be allotted time to grieve" (n=94, 51.6%), "all those involved in the care of bereaved

parents should be well-informed" (n=96, 52.7%), and "bereaved families require professional follow-up to cope with the experience of perinatal loss" (n=109, 59.9%). This information is presented in Table 3.

Table 4 shows nurses' attitudes regarding factors affecting perinatal bereavement care. Most respondents agreed that "the unit should have a clear policy for the management of perinatal bereavement" (n=119, 65.4%) and "join a training program on bereavement care" (n=106, 58.2%). Respondents show high positive (n=155, 85.2%) attitudes towards perinatal bereavement care.

Practices on perinatal bereavement care

Table 5 shows the average rating for each caring behaviour related to perinatal bereavement care and the average distribution of scores among participants. A mean score of 3.5 or higher indicates positive caring behaviours. Overall, 58.8% of participants demonstrated favourable caring behaviours. The identified favourable care behaviours include involving the partner in providing support, encouraging the woman to discuss her loss (M= 3.8; SD= 1.022), and verifying if there is support available during and after the loss (M= 3.84 SD= 0.864 for the woman M=3.83, SD= 0.847 for the partner). Additionally, respondents reported educating mothers on what to expect in terms of physical health after perinatal loss (M= 3.68; SD= 0.852), guiding them through their emotional response to the loss (M= 3.81 SD= 0.813), and providing coping strategies (M= 3.79 SD= 0.808).

Relationships between knowledge, attitudes, and practices on perinatal bereavement care and selected socio-demographic variables

The information presented in Table 6 shows the correlation between total knowledge, attitude score, and various characteristics of nurses. It was found that there is a significant relationship between race, marital status, ward speciality, and experience in caring for grieving parents with the level of knowledge on perinatal bereavement care (PBC). A statistically significant relationship exists between years of working experience and nurses' attitudes toward PBC. High qualifications and designation were also found to be statistically significant.

Table 6: Relationship between total knowledge, attitude and practice score and nurses' personnel characteristics.

Variables	Knowledge		Attitudes		Practices	
	χ^2	p	χ^2	p	χ^2	p
Age	5.358	>0.05	6.571	>0.05	3.412	>0.05
Race	11.310	<0.05	6.427	>0.05	1.937	>0.05
Highest qualification level	3.132	>0.05	1.980	>0.05	10.389	<0.05
Designation	2.001	>0.05	1.476	>0.05	9.075	<0.05
Years of working experience	6.649	>0.05	18.410	<0.05	3.947	>0.05
Marital status	6.087	<0.05	0.984	>0.05	1.796	>0.05
Ward Specialty	8.907	<0.05	2.057	>0.05	3.252	>0.05
The unit had a clear policy on the management of bereavement	1.502	>0.05	0.304	>0.05	0.476	>0.05
Personal grieving experience	2.182	>0.05	3.742	>0.05	0.656	>0.05
Taking courses related to bereavement	0.118	>0.05	2.780	>0.05	0.079	>0.05
Experience in handling grieving parents.	8.078	<0.005	5.825	>0.05	3.449	>0.05

Table 7: Correlation between the knowledge, attitudes, and practices of the studied participants.

Variables	Correlation coefficient (ρ)	p
Knowledge versus attitudes	0.049	>.05
Knowledge versus practices	0.136	>.05
Attitudes versus practices	0.142	>.05

Table 7 shows the correlation between the studied participants' knowledge, attitudes, and practices. It indicates a weak positive correlation between knowledge, attitude, and practice regarding perinatal bereavement.

Discussion

The study aimed to investigate nurses' knowledge, attitudes, and practices on perinatal bereavement care in Malaysia. According to the results, 67.0% of nurses have insufficient knowledge regarding perinatal bereavement care (PBC) concepts. The findings align with a previous study by Mohamed, Elati, and Zaki [9], where 82.0% of participants had inadequate knowledge of PBC. However, 85.2% of the participants in the study showed a high positive attitude towards the subject. This aligns with a previous study by Kim and Kim [13], which explored nurses' attitudes and stress levels about PBC. The nurses in the study also exhibited positive attitudes towards PBC. The study shows that 58.8% of nurses exhibit positive, caring behaviour. This is consistent with a previous study done by Engel and Rempel [12] that found midwives and nurse practitioners demonstrated favourable caring behaviour.

Demographic Characteristics of Participants

The study involved 182 nurses, 45 of whom were registered nurses, 124 of whom were registered midwives, and 13 of whom were community nurses. All the nurses hold Annual Practice Licence from the Nursing Board of Malaysia. The findings revealed that 51.6% of the nurses were aged between 30 and 39, with an average age of 36.87 and a standard deviation of 8.226. Malay nurses account for more than half of the studied population, i.e., 65.9%. This is reflected in the Malaysian demographic profile, where Malay accounts for 62.5% of all ethnic groups [14]. 90.1% of the nurses were identified as experienced nurses, most of them having working experience in nursing of more than 5 years. An

experienced nurse is a registered nurse who has over 5 years of clinical experience in nursing [17]. Although most of the studied nurses were experienced nurses and had experience in taking care of bereaved mothers (n=130, 71.4%), less than half of them (n=73, 40.1%) had attended training related to bereavement care. The results suggest that insufficient educational programs may result in insufficient knowledge. Healthcare providers have acknowledged that training and education are crucial to possess the necessary skills in bereavement care [18]. Montero et al. [10] also emphasised the need for training on perinatal grief, communication, and support skills.

Knowledge Level of Perinatal Bereavement Care Concepts

The study revealed that most of the respondents show the inadequacy of knowledge on factors that might have an impact on how different parents experience and cope with their loss (n=126, 69.2%), essential steps to counselling bereaved parents (n=118, 64.8%), risk of complicate/disenfranchised grief (n=112, 61.5%), the effect of perinatal bereavement on couple relationship (n=115, 63.2%) and the psychological effects of perinatal bereavement on fathers (n=121, 66.5%). These knowledge gaps present the risk of compromising the quality of bereavement care. Lacking knowledge of factors that might impact how different parents experience and cope with their loss signifies a lack of insight into parents' needs in healthy grieving, thus presenting the risk of compromising the quality of bereavement care. Bereavement counselling support is important to facilitate healthy coping and adjustment. Failing to know the essential steps to counselling bereaved parents reflects a lack of competency in assessing parents' physical, emotional, intellectual, spiritual, and social needs. It also reflects a lack of knowledge on the risk predisposing to complicated grief as it requires nurses to distinguish normal from complicated grief. Men and women grieve differently. Not recognising this leads to a lack of gender and personalised bereavement support. The lack of knowledge of the psychological effects of perinatal bereavement on fathers can cause them to experience a sense of powerlessness, insignificance, and sorrowful distress [19]. Without personalized gender-specific bereavement support, couples may experience challenges in managing their grief and communication, leading to potential disputes and negative impacts on their lives. Research shows that gender disparities can contribute to these issues [20].

Attitudes of nurses on PBC

The study revealed that 85.2% of the participants in the study showed a high positive attitude towards the subject. The significance of the attitudes of nursing staff in the physical and emotional recuperation of women who have experienced the loss is extensively documented [21]. Conversely, insufficient care could worsen difficult grief [7]. The majority of surveyed nurses agreed with the following statements: "The caring grief program should offer psychological support to the bereaved parents" (n=100, 54.9%), "bereaved parents should be allotted time to grieve" (n=94, 51.6%), "all those involved in the care of bereaved parents should be well-informed" (n=96, 52.7%), and "bereaved families require professional follow-up to cope with the experience of perinatal loss" (n=109, 59.9%). It signifies that the

studied nurses knew that a caring grief program is significant in providing psychological support to bereaved parents. Besides, it also indicates that nurses were aware that the support of couples is an ongoing process, initiated from the moment of diagnosis through delivery and postpartum and after they have gone home.

Most respondents agreed "the unit should have a clear policy for the management of perinatal bereavement" (n=119, 65.4%) and "join a training program on bereavement care" (n=106, 58.2%). Boyle, Horey, Middleton, & Flenady [22] supported that evidence-based policies and protocols on the key aspect of perinatal bereavement care are proposed to be kept in place in the area of practice to help guide ground nurses in day-to-day practices. Wool and Catlin [23] supported that high-quality and consistent bereavement services can be improved by having standardised care guidelines, policies, and educational opportunities across the healthcare system.

Practices of PBC

Overall, 58.8% of participants demonstrated favourable caring behaviours. The identified favourable care behaviours include involving the partner in providing support, encouraging the woman to discuss her loss (M= 3.8; SD= 1.022), and verifying if there is support available during and after the loss (M= 3.84 SD= 0.864 for the woman M=3.83, SD= 0.847 for the partner). Vig et al. [24] supported that a well-trained healthcare professional in bereavement care can figure out when and how to aid bereaved parents and which family members, friends, and communities can provide additional assistance. Support from friends and extended family is recognised to help strengthen family ties [25] and reduce the psychosocial impact on bereaved mothers [26]. Involvement of a partner in bereavement care helps both bereaved mother and partner to grieve in tandem as men and women were found to grieve differently. Perceived partner support during the bereavement period is known to help prevent long-term grief and distress [27].

Additionally, respondents reported favourably in educating mothers on what to expect in terms of physical health after perinatal loss (M= 3.68; SD= 0.852), guiding them through their emotional response to the loss (M= 3.81 SD= 0.813), and providing coping strategies (M= 3.79 SD= 0.808). According to The American Academy of Paediatrics (APP) / American College of Obstetricians and Gynaecologist (ACOG) Guidelines for Perinatal Medicine, one of the goals of the healthcare team in bereavement care is to comprehend the grief reactions of the family and to help them cope and adjust healthily. Gold [28] supported that quality perinatal bereavement care falls into three areas: emotional support, physical support, and education. After delivery, the postpartum period following perinatal loss can be especially challenging for a bereaved mother as she must process emotional (baby blues, postpartum depression) and physical (recovery and pain from delivery) changes.

Relationships between Knowledge, Attitudes, and Practices on PBC and Demographic Variables

It has been identified that knowledge about PBC and experience caring for grieving parents are significantly correlated. It is

believed that the experience of handling bereaved parents can help nurses gain a better understanding and knowledge of PBC. Additionally, it was found that the attitude of nurses towards PBC is linked to their years of working experience. This finding aligns with the study by Fristedt et al. [15], which showed that registered nurses with more experience tend to have a more positive attitude toward patient care than undergraduate nurses. The study found a significant correlation between the practices of PBC and job designation and the highest level of education attained. As educational level is closely related to the nursing job role or designation, it is reasonable to conclude that there is a connection between nursing roles and PBC practices. This discovery aligns with the study by Engel and Rempel [12], where midwives and nurse practitioners display more favourable caring behaviour than registered nurses.

Concerning the correlation of nurses' knowledge, attitude, and practices, the current study shows a weak positive correlation between knowledge, attitude, and practice regarding perinatal bereavement. This aligns with Mohamed, Elati, & Zaki's [9] study, which found a positive correlation between knowledge and attitude. Montero et al. [10] supported that lack of knowledge and skills to deal with perinatal loss was found to be the main contributing factor to inappropriate attitudes.

Conclusion

This study in Malaysia examined the knowledge, attitudes, and practices of registered nurses, midwives, and community nurses regarding perinatal bereavement care. The results showed that 67.0% had insufficient knowledge, 85.2% had a highly positive attitude, and 58.8% displayed favourable caring behaviours. The level of knowledge about perinatal bereavement care was related to experience in caring for grieving parents, while nurses' attitudes were related to years of working experience. The practices of perinatal bereavement care were also found to be related to designation and qualification level. To address these issues, it is recommended that undergraduate healthcare education, postgraduate education, and Continuing Professional Education (CPE) workshops focus on educating healthcare professionals about perinatal bereavement care. Evidence-based policies and protocols should also be developed to support grieving parents and family members. Perinatal bereavement care is a crucial aspect of obstetric care, and healthcare professionals, especially nurses, require extensive knowledge, skills, and consideration to provide high-quality bereavement care unique to each individual consistently.

Implication of the Study

The study's implications are relevant to organisational and nursing education. The maternal-child division should make training mandatory and ongoing to ensure staff is well-equipped to handle perinatal bereavement care. Additionally, hospitals should establish policies based on the latest evidence to support grieving parents and family members. Including perinatal bereavement care education in undergraduate healthcare programs and

postgraduate curricula such as master-level or midwifery courses is recommended.

Recommendation

Conducting the current study in various settings with diverse demographic attributes and geographical regions is advisable. A study on the experiences of Malaysian parents is suggested to enhance the perceived bereavement requirements among different ethnic groups in Malaysia.

Funding

This project was funded by the KPJ Health Care University research grant (KPJUC/RMC/SON/EC/2021/319).

Acknowledgement

The authors thank the Chief Nursing Officer for their support and assistance. They also thanked the nurses and midwives from all KPJ hospitals who participated in the study.

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