SLJN, 2022
Vol. 1, No. 1 (pp. 11-20)

Research Article

Public Health Midwives' Perceptions, Challenges and Attitudes Towards Health Education on Vulvovaginal Discharge

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Abstract

Background and Objective: Public Health Midwife (PHM) is the grass root level health care provider in the Sri Lankan health care system. This study was carried out to assess perceptions, challenges and attitudes of PHMs' in educating women on vulvovaginal discharge (VVD) and their current health education activities on hygienic practices and behaviour changes among females aged 18 to 49 years.

Methods: This cross-sectional study was conducted among all volunteering PHMs who work in the Colombo district, Sri Lanka. A self-developed, content validated, pre-tested, self-administered questionnaire was used to collect data. Descriptive statistics were used to analyse data using SPSS software version 21.

Results: A total of 308 PHMs participated and the mean age of the participants was 40 years (SD = 10). Thirty-six percent of the participants had work experience of more than 11 years. Majority of PHMs have performed health education activities during home visits (72.7%) and at clinics (66.2%). Most (97%) agreed that educating females on VVD is one of their primary responsibilities. Majority (70.7%) disagreed that "for most patients, health education does little to promote health-seeking behaviour" indicating positive attitudes towards health education. Nearly 17% of the participants rated their competency in providing health education on VVD as poor. Lack of available time (84.7%), teaching aids (75%) and women's anxiety and shyness in asking questions or revealing health problems in the community (73.4%) were the major challenges faced during their health education on gynaecological health conditions.

Conclusions: The majority of the PHMs had positive attitudes towards health education on VVD. It is recommended that learning opportunities should be created in the form of training programmes. This will help in updating knowledge, skills and attitudes to meet the growing demand for quality health education and referral activities at the community level.

Keywords: *health education, perception, attitudes, public health midwives, vulvovaginal discharge*

Sri Lankan Journal of Nursing, 2022, 1 (1) : 11 - 20.

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Received: 3rd November 2021; Accepted: 22nd January 2022

How to cite: Ilankoon, I.M.P.S., Goonewardena, C.S.E., Fernandopulle, R.C., & Perera, P.P.R. (2022). Public health midwives' perceptions, challenges and attitudes towards health education on vulvovaginal discharge, *Sri Lankan Journal of Nursing,*1(1): 11 -20.

Introduction

Public sector health care of Sri Lanka is under the Ministry of Health and is delivered through two parallel streams. It includes curative health services varying from basic care at the primary level to specialized care through a range of hospitals, and community health services that focus mainly on promotive and preventive health needs of the population (Senanayake et al., 2017). The Public Health Midwives (PHMs) have been an important part of the primary healthcare system in Sri Lanka since the early twentieth century (Silva, 2011) and provide care at the doorstep (Senanayake et al., 2011).

Public Health Midwife is the family health care worker who walks from house to house looking after a large population in a given area of the Sri Lankan community. Further, PHMs are recognised by the public as caring and skilled professionals who provide an important service to their communities and they have gained the respect of villagers and other health authorities in the communities (Infanti et al., 2015). They mainly target maternal and child health, family planning and health education /promotion, where services are more focused on females of a family (Ministry of Health, 2006). Although traditionally PHMs focus only on midwifery, now they have evolved into a professional cadre, playing a role in preventive health covering many aspects other than midwifery (Silva, 2011). Therefore, the PHMs have an important role in promoting women's health.

Gynaecological complaints which can compromise the sexual and reproductive health of women are frequent reasons for primary health care clinic visits (von Glehn et al., 2017) especially abnormal vulvovaginal discharge (VVD). Most of the women do not seek medical advice but depend on home remedies to manage abnormal VD in Sri Lankan communities (Ilankoon et al., 2017). Public Health Midwives can address women's health issues, advice and refer them where necessary. It is important to improve the quality of reproductive health care delivery in developing countries to increase utilization and sustainability (Al-Qutob & Nasir, 2008). For this purpose, it is vital to initiate such training for PHMs to improve their competencies and attitudes in caring for women's needs.

Assessing PHMs' perceptions and attitudes on caring for women with a common gynaecological complaint and the current health education practices will be useful in planning training programmes for PHMs to improve their knowledge and skills and enhance their competency in caring for women complaining of abnormal vaginal discharge, detecting pathological causes and referring them to specialized care. Hence, this study was aimed to assess PHMs' perceptions, challenges and attitudes pertaining to VVD and their current health education activities on hygienic practices and changing behaviours among females aged 18 to 49 years.

Methods

This cross-sectional study was carried out in the Colombo District in the Western Province of Sri Lanka. All PHMs who have worked at least six months before the data collection were invited to participate in the study. The total number of PHMs who participated was 308. The PHMs who were on maternity leave, or leave for more than two weeks during the time of the study were excluded.

Study instrument

A self-developed, validated, pre-tested, self-administered questionnaire was used to collect information from PHMs. The content and face validity of the instrument (English version) was evaluated by soliciting feedback from six subject experts in the field of Gynaecology and Obstetrics and Community Medicine from

the National Institute of Health Sciences and the Family Health Bureau. After validation, the English version of the questionnaire was translated to Sinhala and Tamil languages and back translated to English to ensure accuracy by a bilingual expert (Tsang et al., 2017). The questionnaire was pretested at the National Institute of Health Sciences, Kalutara among 30 PHMs who fulfilled the inclusion criteria, and they were not included in the final study sample. The study instrument was tested for acceptability, comprehensiveness and ease of administration and necessary modifications were done.

The first section of the questionnaire consisted of socio-demographic and work related characteristics of the PHMs. The second section consisted of 11 statements related to attitudes about VVD and related health education in a five-point Likert scale of Strongly Agree, Agree, Don't Know, Disagree and Strongly Disagree. Third section consisted of questions on PHMs' daily teaching activities, facilities and support for health education at the clinic and the community settings. Perceived level of competency in health education on VVD of the PHMs was assessed using a Visual Analog Scale. The frequency of daily teaching activities related to VVD were assessed using a five point Likert scale (Always, Usually, Sometimes, Rarely, Never) (Vagias, 2006). There were six questions related to challenges faced by PHMs in providing health education during field and clinic activities. In addition, there were five statements to rate PHMs' perceptions of the facilities and support available for health education.

Data collection

Permission to conduct the study in Colombo District was obtained from the Regional Directorate of Health Services, Colombo and the Chief Medical Officer of Health, Colombo Municipal Council area.

Data analysis

Data were coded and entered into SPSS software (version 20) before analysis. Descriptive statistics were applied to obtain percentages and means with SD for the continuous variables.

Ethical considerations

Recruitment of all participants was strictly voluntary and informed written consent was obtained. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medical Sciences, University of Sri Jayewardenepura (Ref. No. 27/14).

Results

Socio-demographic characteristics of the PHMs

A total of 308 PHMs participated in the study and the mean age of the study participants was 40.69 years (SD = 10.72). Nearly half of the participants were 25-35 years old and had worked as PHM's for 1-10 years. Mean years of working as a PHM was 13.15 years (SD = 10.02). Majority of the PHMs reported that homes were the most common places of performing health education during their visits (72.7%) and at clinics (66.2%). The most common topics used in their health education were pregnancy (82.5%), family planning (79.9%), and breastfeeding (64.3%) (Table 1).

Attitudes towards health education on vulvovaginal discharge

Nearly 69% of PHMs stated that they were confident with their ability to teach about vaginal discharge. Majority of the PHMs agreed with the statements "it is necessary to take treatment for offensive VVD" and "any type of VD should be taken seriously". Almost 75% of PHMs were of the opinion that "vaginal discharge is always a normal condition" and the majority (86%) expressed that they were comfortable in talking about vaginal discharge.

Table 1: Baseline socio-demographic characteristics (N=308)

Characteristics	Category	n (%)
Age	25- 35 years	142 (46.1)
	36- 45 years	55 (17.9)
	≥ 46 years	111 (36.0)
Duration of working as a PHM	1-10 years	152 (49.4)
	11-20 years	73 (23.7)
	≥ 21 years	83 (26.9)
Place of performing health education	At homes (during visits)	224 (72.7)
	At clinics	204 (66.2)
	At PHM office	54 (17.5)
Common health education topics[µ]	Family planning	246 (79.9)
	Pregnancy	254 (82.5)
	Breastfeeding	198 (64.3)
	Early childhood development	161 (52.3)
	Immunization	151 (49.0)
	Newborn care	144 (46.8)
	Well-women clinic	124 (40.3)
	Personal hygiene	35 (11.4)

[µ]Multiple responses were allotted. n-frequency, %- percentages

Nearly half of them did not agree with the statement that body heat is a cause for excessive vaginal discharge and 53.9% of them did not agree with the statement "those who have excessive vaginal secretion are always not healthy". Further, the majority disagreed that "those who have excessive vaginal secretions don't have good personal hygiene" and they were comfortable in talking about VVD (Table 2).

Public Health Midwives' daily teaching activities, facilities and support

Majority of the PHMs (59%) agreed that they discuss female's vaginal health, educate the females regarding possible long-term health consequences related to untreated excessive VD (74%), assess the influence of the family background on personal hygiene (76%), assess the influence of the home environment on personal hygiene (70%), identify females at risk for reproductive health matters and educate them regarding prevention of disease (81%) (Table 3).

Nearly 85% of PHMs mentioned that lack of available time is the main challenge for health education activities during field and clinic work and 66% stated that lack of knowledge on VVD was another challenge. Further, 73% of PHMs stated that the existence of anxiety and shyness in asking questions or revealing health problems among females in the community is another main challenge in providing health education (Table 4).

The perceived level of competency in health education on VVD is presented in Table 5. Nearly 17% PHMs rated their competency in health education on VVD as 'poor', 46% as 'average' and 37% as 'good'. A majority (94.9%) of PHMs indicated that health

Table 2 : PHMs' attitudes regarding vulvovaginal discharge (N=308)

Statement	Strongly Agree n (%)	Agree n (%)	Don't Know n (%)	Disagree n (%)	Strongly Disagree n (%)
Statements Indicating Positive Attitudes					
1.It is necessary to take treatment for offensive VVD	236 (76.6)	67 (21.8)	0 (0.0)	3 (1.0)	2 (0.6)
2.Any type of VD should be taken seriously	71 (23.1)	173 (56.2)	9 (2.8)	48 (15.6)	7 (2.3)
3.Weight loss can occur due to abnormal VVD	18 (5.8)	107 (34.8)	70 (22.8)	95 (30.8)	18 (5.8)
4.I am confident with my ability to educate the community regarding VVD	31(10.1)	183 (59.3)	27 (8.8)	59 (19.2)	8 (2.6)
Statements Indicating Negative Attitudes					
1.Vaginal discharge is always a normal condition	67 (21.8)	166 (53.8)	8 (2.6)	55 (17.9)	12 (3.9)
2.Excessive vaginal discharge can occur due to body heat	17 (5.5)	114 (37.0)	65 (21.1)	99 (32.2)	13 (4.2)
3.Those who have excessive VD are always not healthy	9 (2.9)	90 (29.2)	40 (13.0)	152(49.4)	17 (5.5)
4.Those who have excessive VD do not have good personal hygiene	5 (1.6)	69 (22.4)	19 (6.2)	196(63.6)	19 (6.2)
5.I find it uncomfortable to talk about vaginal discharge.	2 (0.6)	26 (8.4)	15 (4.9)	196(63.7)	69 (22.4)
6.For most patients, health education does little to promote health-seeking behavior	15 (4.9)	64 (20.8)	11 (3.6)	162(52.5)	56 (18.2)

VD - vaginal discharge, n-frequency, %- percentages

education on VVD is important. Ninety-three percent participants agreed that they are interested in improving their knowledge about VVD and reproductive tract infections. Further, 53% of them were of the opinion that health education is a primary responsibility of a PHM. Majority (69%) of the participants were satisfied with the available environment for health education during home visits (n=213) and 89% of PHMs said that they advise any woman who complained of increased VD to attend a gynaecological clinic in a hospital while 18% advised them to meet MOH (Table 5). Further, most of the PHMs

Table 3 : PHMs' daily teaching activities on vulvovaginal discharge (N=308)

Daily teaching activities	Always n (%)	Usually n (%)	Sometimes n (%)	Rarely n (%)	Never n (%)
a. Discuss female's vaginal health	36 (11.7)	144 (46.8)	102 (33.1)	22 (7.1)	4 (1.3)
b. Use educational materials for teaching (eg. Pictures, Cards)	42 (13.6)	89 (28.9)	96 (31.2)	40 (13.0)	41(13.3)
c. Utilize family input when appropriate	32 (10.4)	68 (22.1)	123 (39.9)	59 (19.2)	26 (8.4)
d. Educate the females regarding possible long-term health consequences related to untreated excessive VD	106 (34.4)	123 (39.9)	55 (17.9)	19 (6.2)	5 (1.6)
e. Provide opportunities for the female to discuss their feelings	165 (53.6)	77 (25.0)	48 (15.6)	16 (5.2)	2 (0.6)
f. Assess influence of the family background on personal hygiene	112 (36.4)	121 (39.3)	55 (17.8)	16 (5.2)	4 (1.3)
g. Assess influence of the home environment on personal hygiene	102 (33.1)	115 (37.3)	65 (21.1)	23 (7.5)	3 (1.0)
h. Document health education activities	103 (33.4)	79 (25.7)	68 (22.1)	29 (9.4)	29 (9.4)
i. Identify females at risk for reproductive health matters and educate them on prevention of disease	133 (43.3)	115 (37.3)	38 (12.3)	14 (4.5)	8 (2.6)

VD - vaginal discharge, n-frequency, %- percentages

(n=213, 61.4%) agreed that they have good support for professional development in the area of health education. Majority of the PHMs indicated that continuing education services help them to improve confidence to change health/ lifestyle (71.8%), improve knowledge of medical management of different diseases (42.5%) and educate families with competency (39.6%).

All PHMs agreed to participate in future health education sessions giving details of VVD and their management if given the opportunity. The majority of the PHMs (n=231,75%) rated 'identifying differences between normal and abnormal vaginal discharge' as the priority learning area in an educational programme. Other areas such as methods of health education (n = 159, 51.6%), 'education for patients with VD' (n=152, 50.7%) and 'improving communication skills' (n=26, 46.4%) were rated as the second, third and fourth priority learning areas.

Table 4: Challenges faced in providing health education during field and clinic activities

Challenges	n	%
Working situation[µ]		
Lack of available time	261	84.7
Lack of a good educational environment at community /clinic	203	65.9
Lack of teaching materials for health education	231	75.0
Lack of knowledge of Vulvovaginal Discharge	202	65.6
Characteristics of females in the community[µ]		
Lack of interest in learning	207	67.2
Presence of anxiety in females and shyness in asking questions or revealing health problems	226	73.4

[µ]Multiple responses were allotted. n-frequency, %- percentages

Discussion

Primary health care centres provide majority of women of the low socioeconomic status with basic reproductive services in Sri Lanka, similar to other developing countries in the region. In addition to routine care, PHMs engage in providing health promotion and disease prevention services at community level in Sri Lanka. This study was carried out to assess perceptions, challenges and attitudes of PHMs' concerning VVD and their current health education activities on hygienic practices and behaviour change among females aged 18 to 49 years.

Nearly half of the PHMs in the present study were having below 10 years of work experience. Abdul-Rahman et al. (2015) mentioned that giving additional training to PHMs will help to render better services for many more years, as well as to provide on-the-job training for others. Thus, having trained on vaginal health, PHMs in the present study would give better outcomes as the majority were having longer period to serve the community.

The present study found that PHMs have positive attitudes towards caring for women who complain of abnormal VVD by accepting and educating them on VVD as one of their primary responsibilities. In addition, they were comfortable talking about VVD. A study conducted on the assessment of community maternal care performance of public health midwives of a particular province of Sri Lanka found that more than 50% of PHMs have indicated that "poor health is due to one's own fault, and the health services cannot help much", showing negative attitudes (Gunathunga & Fernando, 2000). However, in the present study, it was evident that a majority of the PHMs did not agree with the statement, "for most patients, health education does little to promote health-seeking behaviour". Further, they showed their responsibility and positive attitudes towards health education on VVD and health promotion. Although there are no similar studies in the literature, some related studies have found positive attitudes maintained by a majority of health care workers in Eastern Ethiopia, towards the provision of reproductive health services to unmarried adolescents including matters concerning content related to vaginal discharge (Tilahun et al., 2012). In the present study, the majority of PHMs agreed that they engage in health education activities in the community, most commonly through home visits as well as in clinics. It has been documented that one of the main duties of the

Table 5 : PHMs' perceptions on health education regarding VVD (N=308)

Responses	n	%
Perceived level of competency in health education on VVD		
Poor	52	16.9
Average	141	45.8
Good	115	37.3
Perceived role in health education regarding vaginal health		
A primary responsibility	162	52.6
A great deal of responsibility	137	44.5
Some responsibility	8	2.6
Little responsibility	1	0.3
Perceived importance of updated knowledge on VVD and RTI*		
Very interested	287	93.2
Fairly interested	16	5.2
Fairly concerned	3	1.0
Not concerned	2	0.6
Perceived importance of educating females on vaginal health		
No importance	2	0.6
Low importance	2	0.6
Moderate importance	12	3.9
Highly importance	292	94.9
Available environment for health education during home visits		
Generally not satisfied	74	24.0
Generally somewhat not satisfied	16	5.2
No idea	5	1.6
Generally somewhat satisfied	106	34.4
Generally satisfied	107	34.8
The importance of continuing educational services [µ]		
To educate the families with a good competency	122	39.6
To improve confidence in the ability to change health/ lifestyle behavior	221	71.8
To improve knowledge of medical management of different diseases	131	42.5

[µ]Multiple responses were allotted. VVD: Vulvovaginal discharge, *RTI: Reproductive tract infections

PHMs is to conduct field visits except on their clinic days (Ministry of Health Sri Lanka, 2006). The health education topics used by PHMs were mostly addressing the maternal and child health needs unless few of them have addressed other community needs in addition to routine health education. Majority of the PHMs in the present study, agreed that they discuss vaginal health of females, educate them regarding possible long-term health consequences related to untreated excessive VD, identify females at risk for reproductive health issues and educate them regarding the prevention of disease. Tilahun et al. (2012) emphasized the need for more training and awareness creation among health care workers to enhance their existing soft skills related to client interaction and attitudes towards

reproductive health services to adolescents. Educating PHMs on VVD would be useful in providing quality health education at the community level and promoting women's health-seeking behaviour. In the present study, although a majority had agreed that they discuss with women about vaginal health, only a few agreed that they always use educational materials for teaching; some always utilized family input when appropriate and to educate the females regarding possible long - term health consequences of untreated excessive VD. This indicates that, although PHMs educate women on vaginal health, there is a need of improving their knowledge of health education and VVD and the methods of health education to make them competent enough to conduct quality health promotion activities at community level.

A study conducted by Abrahams et al. (2001) in South Africa found that when it comes to maternal services, listening to women, bridging the gap between the perceived needs of pregnant women and care provided by midwives are major challenges faced by midwives. In the present study, PHMs highlighted "lack of available time" as the main impediment in providing health education on VVD and this factor was followed by "lack of teaching materials for health education" and "the presence of women's anxiety and shyness in asking questions or revealing health problems". PHMs in Sri Lanka feel overwhelmed by the clerical and administrative burdens of their work (Infanti et al., 2015). However, in a study conducted in Kalutara district of Sri Lanka, health care providers including PHMs reported a lack of funding and inadequate facilities, such as counselling rooms and resources for awareness programmes as challenges (Dawson et al., 2013). Moreover, the authors found shyness of adolescents as a challenge in generating demand for services, similar to the present study. However, in the present study, the majority of the PHMs agreed that the support for professional development in terms of health education is adequate.

The information and training needs of health workers are fundamental (Pakenham-Walsh & Bukachi, 2009). However, in the self-assessed competency in health education on VVD, a few PHMs in the study sample had rated their competency as 'poor' This prevents them from taking up learning opportunities. Similarly, deterioration of knowledge with the passage of service period and age may happen due to lack of continuing education and inadequate evaluation (Gunathunga & Fernando, 2000). In the present study, majority of the PHMs have accepted the importance of continuing education services and stated that continuing education can help them to improve confidence in the ability to change health/ lifestyle, knowledge of medical management of different diseases and skills in educating the families with competence. This highlights that PHMs' have perceived the need of improving their knowledge, attitudes and skills in caring for women with different health issues.

Conclusions

Majority of PHMs had positive attitudes towards VVD and health education towards vaginal health. Lack of available time, lack of knowledge on VVD and existence of anxiety and shyness in asking questions or revealing health problems among females in the community were the main challenges for health education activities during field and clinic work mentioned by the PHMs. Majority of the PHMs displayed the need for continuing education in order to improve confidence in health education on vaginal health and identify females at risk for reproductive health matters especially sexually transmitted and other reproductive tract infections.

It is recommended that learning opportunities on vaginal health should be created for PHMs such as training programmes and providing reading materials.

Funding statement

This work was supported by University Research Grant (ASP/06/RE/MED/2013/31) of the University of Sri Jayewardenepura, Sri Lanka.

Conflict of interest

The authors declare that they have no conflict of interests.

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