

# Public Health Midwives' perceptions of and challenges 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 of PHMs' regarding 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 consenting PHMs who work in Colombo district, Sri Lanka. A self-developed, validated, pretested 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 40.69 years (SD±10.72). Thirty-six per cent of the participants had work experience of more than 11 years. Majority of the PHMs have performed health education activities during home visits (72.7%) and at clinics (66.2%). A majority agreed that educating females on VVD is one of their primary responsibilities (97%). Majority (70.7%) of the participants disagreed that "for most patients, health education does little to promote health-seeking behaviour" indicating positive attitudes towards health education activities. 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:** 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 community level.

**Keywords:** *health education; perception; attitudes; public health midwives; gynaecological complaints*

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## Introduction

The public sector health care of Sri Lanka is under the Ministry of Health and is delivered through two parallel streams. They include 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).

The PHM is the family health care worker who walks from house to house and looks after a larger 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 focused 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 healthcare clinic visits (von Glehn, Sidon and Machado, 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). PHMs can address women's health issues and advice and refer them where necessary as they are more close to the community. It is important to enhance the quality of reproductive health care delivery in developing countries to increase utilization and sustainability (Al-Qutob and Nasir, 2008). For this purpose, it is vital to

initiate such training to PHMs to improve their competencies and attitudes in caring for women's needs.

Assessing the PHMs' perceptions on caring for women with a common gynaecological complaint and the current health education practices will be useful to plan training 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 aimed to assess PHMs' perceptions related to VVD and their current health education activities on hygienic practices and changing behaviours among females aged 18 to 49 years.

## Materials and methods

This cross-sectional study was carried out in the Colombo District in the Western Province of Sri Lanka. All Public Health Midwives who have worked at least 6 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, pretested self-administered questionnaire was used to collect information from PHMs. The judgmental validity (content and face validity) of the instrument (English version) was evaluated by soliciting feedback from subject experts in the field of Gynaecology and Obstetrics and Consultant Community Physicians from the National Institutes of Health Sciences and Family Health Bureau. After validation, the English version of the questionnaire was translated to Sinhala and Tamil languages and again retranslated to English to ensure accuracy by a bilingual expert.

The questionnaire consisted of socio-demographic characteristics of the PHMs (including age, education level, work experience, general health education activities etc), 11 statements related to attitudes about vaginal discharge and related health education with a five-point Likert scale of Strongly

Agree-1, Agree-2, Don't Know-3, Disagree-4 and Strongly Disagree-5. They were asked to rate their competency in the implementation of health education on VVD, the importance of educating females regarding vaginal health, the importance of getting updated knowledge about VVD and reproductive tract infections and PHMs' responsibility for health education activities regarding vaginal health for females of their PHM areas. Further, PHMs were asked to rate statements that are based on health education on vaginal health and the daily teaching activities related to VVD in a five-point Likert scale for frequency (Always, Usually, Sometimes, Rarely, Never) (Vagias, 2006). In addition, there were few questions on the perceptions of PHMs on the facilities and support they have while carrying out health education.

#### Data collection

Permission to conduct this 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. Before commencement of the study, the purpose of

the study and confidentiality of the information was explained to the PHMs. Self-administered questionnaires were distributed among PHMs during lunch break or at the end of the monthly conference at the MOH office without disturbing their routine activities.

#### 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. A p-value < 0.05 was considered statistically significant for all tests.

#### Ethical issues

Recruitment of all participants was strictly voluntary and informed written consent from participants was obtained. Anonymity and confidentiality of the information were maintained by providing a code number for the participants. Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medical Sciences, the University of Sri Jayewardenepura before the commencement of the study.

## Results

### Socio-Demographic Characteristics of the PHMs

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

Characteristics	Frequency (Percentage)	
<b>Age</b>	25- 35 years	142 (46.1)
	36- 45 years	55 (17.9)
	≥ 46 years	111 (36.0)
	Mean age	40.69 years (SD ± 10.72)
<b>Duration of working as a PHM</b>	1-10 years	152 (49.4)
	11-20 years	73 (23.7)
	≥ 21 years	83 (26.9)
	Mean duration of working as a PHM	13.15 years (SD ± 10.02)
<b>Place of performing health education<sup>u</sup></b>	During home visits	224 (72.7)
	At clinics	204 (66.2)
	At PHM office	54 (17.5)
<b>Common health education topics<sup>u</sup></b>	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)

<sup>a</sup>Multiple responses were allotted.

A total of 308 PHMs participated in the study and the mean age of the study participants was 40.69 (SD ± 10.72) years. 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 (SD± 10.02) years. The majority of PHMs expressed that

their most common places of performing health education are during home 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

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

Statements indicating positive attitudes	Strongly Agree n (%)	Agree n (%)	Don't Know n (%)	Disagree n (%)	Strongly Disagree n (%)
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 behaviour	15 (4.9)	64 (20.8)	11 (3.6)	162(52.5)	56 (18.2)

VD - Vaginal Discharge, n-frequency, %- percentages

Nearly 69% of PHMs stated that they are confident with their ability to teach about vaginal discharge. The majority of the PHMs agreed with the statements "it is necessary to take treatment for offensive VD" and "any type of VD should be taken seriously".

Nearly 75% of PHMs were of the opinion that "vaginal discharge is always a normal condition" and the majority (86%) expressed that they are comfortable in talking about vaginal discharge. 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 of “those who have excessive vaginal secretion are always not healthy”.

Further, the majority disagreed that “those who have excessive vaginal secretion don’t have good personal hygiene” and they are comfortable in talking about VVD (Table 2).

### Public Health Midwives’ Daily Teaching Activities, Education environment and Support

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 her 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 Health education activities are documented in a record	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 the prevention of disease	133(43.3)	115(37.3)	38 (12.3)	14 (4.5)	8 (2.6)

The majority of the PHMs (59%) agreed that they discuss the 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).

Table 4: Challenges faced in providing health education during field and clinic activities (N=308)

Challenges	n	%
Working situation <sup>h</sup>		
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 VVD	202	65.6
Characteristics of females in the Community <sup>h</sup>		
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

<sup>h</sup>Multiple responses were allotted. n-frequency, %- percentages

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

Responses	n	%
Perceived level of competency in health education on VD		
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 VD and RTI		
I am very interested	287	93.2
I am fairly interested	16	5.2
I am fairly concerned	3	1.0
I am 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 <sup>u</sup>		
to educate the families with a good competency	122	39.6
to improve confidence in the ability to change health/ lifestyle behaviour	221	71.8
to improve knowledge of medical management of different diseases	131	42.5

<sup>u</sup>Multiple responses were allotted. VD: Vaginal Discharge, RTI: Reproductive Tract Infections

The perceived level of competency of health education on VVD was questioned by the PHMs using a visual analogue scale. Nearly 17% PHMs rated their competency in health education on vaginal discharge as poor, 46% as average and 37% as good. A majority

(94.9%) of PHMs indicated that health education on VVD is important. Ninety-three per cent of 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.

Most (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 women who complain of increased VD to attend a hospital gynaecological clinic while 18% advised them to meet MOH. Further, most of the PHMs (n=213, 61.4%) agreed that they have good support in professional development in the area of health education. The majority of the PHMs indicated that continuing education services help them to improve confidence in their ability to change health/ lifestyle (71.8%), to improve knowledge of medical management of different diseases (42.5%) and to educate families with competency (39.6%).

All PHMs agreed to participate in future health education sessions giving details of VD 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.

## Discussion

Primary health care centres provide the majority of women of 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 the community level in Sri Lanka. This study was carried out to assess perceptions among PHMs' concerning VVD and their current health education activities on hygienic practices and changing behaviours among females aged 18 to 49 years.

Nearly half of the PHMs in the present study were having below 10 years of work experience. This also highlights the value of ongoing training in order to provide quality

care to the public. Abdul-Rahman, Rabiou and Alhassan (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 been trained on health conditions would give better outcomes as the majority were having more years 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 fault, and the health services cannot help much showing negative attitudes (Gunathunga and Fernando, 2000). However, in the present study, it was evident that the majority of PHMs did not agree with the statement, "for most patients health education does little to promote health-seeking behaviour". They show 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 by home visits as well as in clinics. It has been documented that one of the main duties of the 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. In the present study, the majority of the PHMs agreed that they discuss the female's vaginal health, educate the females 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 toward 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 of them had agreed that they always use educational materials for teaching; some always utilized family input when appropriate and educate the females regarding possible long-term health consequences related to untreated excessive vaginal discharge. This indicates that, although health education activities are conducted by PHMs in the field of vaginal health, there is a need of improving their knowledge of health education and VVD and the methods they utilize in health education to make them competent enough to conduct quality health promotion activities at the community level.

A study conducted by Abrahams, Jewkes and Mvo (2001) in South Africa found that when it comes to maternal services, listening to women and bridging the gap between the perceived needs of pregnant women and care provided by midwives are major challenges. 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 feels overwhelmed by the clerical and administrative burdens of their work (Infanti *et al.*, 2015). However, Dawson *et al.* (2013) state that, in a study conducted in Kalutara district, 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. Moreover, they have found adolescent shyness a challenge in generating demand for services (Dawson *et*

*al.*, 2013), similar to what was found in 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 and Bukachi, 2009). However, in the self-assessed competency in health education on VVD, a few PHMs had rated their competency as 'poor' in the study sample. 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 and Fernando, 2000). In the present study, the 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 and recommendations**

Reproductive and sexual health issues are affecting millions of women around the world every year. One of the common complaints of these health issues is abnormal vaginal discharge and the management of abnormal vaginal discharge in the community setting is constrained by a few factors. One is the primary health care workers' competencies and attitudes in communication and assessment of a woman with abnormal vaginal discharge. The majority of the 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. The majority of 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 STIs and other reproductive tract infections.

It is recommended that the learning opportunities should be created in the forms of training programmes and reading material in the first language. Improving access to internet facilities and enhancing English language skills may also help in updating knowledge on reproductive and sexual health.

### Acknowledgement

The authors thank all the study participants for their contribution to the research and the University Research Grant (ASP/06/RE/MED/2013/31), the University of Sri Jayewardenepura for financial support.

### Conflicts of interests:

The authors have no conflicts of interest in this work.

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