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Public Health Midwives' role in health education regarding vaginal discharge: A Cross Sectional Descriptive Study

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Abstract

Objectives:

Public Health Midwife (PHM) is the key health care provider at the domiciliary level in Sri Lankan health care system. They indulge in maternal and childcare services in the Sri Lankan community setting. This study was carried out to assess knowledge and attitudes towards health education activities of the PHMs related to vaginal discharge.

Study Design:

Community based cross sectional study.

Methods:

A self-developed, validated, pretested self-administered questionnaire was used to gather data from PHMs who are serving to a socially marginalized community in the Colombo District in the Western Province of Sri Lanka.

Results:

A total of 56 PHMs participated with a response rate of 82%. Mean age was 36.57 years (SD±10.10). Mean duration of working was 9.05years (SD±9.07). Mean knowledge score was 53.7 (SD ± 12.36). Reproductive tract infections and causes for pathological vaginal discharge were found as poor knowledge areas. Majority (n=29, 91.1%) agreed that they discuss women's health issues and educate them regarding prevention of diseases (n=52, 92.9%). lack of available time (n=46, 82.1%), lack of teaching materials (n=44, 78.6%), lack of a good educational environment (n=45, 80.4%) and lack of knowledge (n=38, 67.9%) and women's lack of interest in learning (n= 46, 82.1%) were identified as the main challenges for health education.

Conclusions:

The findings suggest that majority of PHMs have only a moderate level of knowledge regarding vaginal discharge and there is a need for continuing education in order to improve confidence in health education for women's health issues.

Key Words: Attitudes; Health Education; Knowledge; Public Health Midwives; Vaginal Discharge.

Introduction

The public health midwife is the 'front line' health worker providing domiciliary, promotive and preventative maternal child health and family planning services to a well-defined area consisting of a population ranging from 2000-4000 in Sri Lanka.[1] They e engage in health promotion activities for other communicable and non-communicable diseases as the available public health care worker at the grass root level of the Sri Lankan health care system. They maintain the link between the clinic and community.[2] Their service spread to the rural, urban and estate sectors of the country. Their dedicated service has helped Sri Lanka achieve the best reproductive health indices in the South Asian region.[3]

The first batch of midwives were trained in 1931 in Sri Lanka.[4] The Ministry of Health, Sri Lankan recruits PHMs from the localities in which they are likely to work. The training period is for 18 months with 1 year in a nurse's training school and the rest in a field training centre, National Institute of Health Sciences (NIHS).[3,4,5] The training course at NIHS consist of Primary Health Care, Health Promotion, Management Information System (MIS), Health Management, Statistics and demography, Family Heath, Reproductive Health, Information, Education and Communication, Educational Sciences, Environment and Occupational Health and Logistics.[6]

PHM's conduct field visits in their allocated population in order to ensure the health and wellbeing.[3] Today the service of PHMs has evolved into a career taking a holistic approach in preventive health.[7,8] During these home visits, PHMs can observe women in their home environment and can build good relationship in order to verbalize the women's health issues, especially reproductive health matters.

Women living in socially marginalized communities are vulnerable to many unhealthy practices and lifestyles. In Colombo District, Sri Lanka, socially marginalized communities include populations living in urban slum communities and estate sector. People living in urban low-income communities such as slum and shanty areas referred to as "wattas" are, to some extent, socially and sometimes spatially cut off from surrounding populations and poverty and social marginalization go hand in hand. Their level of education is low and their main source of health information is PHM and they have a close relationship with the community clinic. The prevalence of reproductive tract infections had shown an increasing trend among the low socioeconomic class.[9]

Vaginal discharge is a common female health concern in South Asia.[10] It may be a symptom of reproductive tract infections (RTIs), genital tract malignancies and other reproductive tract disorders. Health education and proper referral will help in early detection of pathological vaginal discharge, prevent complications of delaying treatment and improve women's health. PHMs expressed that they need to be trained in basic counseling or family mediation and they are overwhelmed by the clerical and administrative burdens of their work.[5] The aim of present study is to describe the PHMs' existing knowledge and attitudes towards health education on vaginal discharge and to assess their health education activities regarding normal and abnormal vaginal discharge and unhealthy practices.

Methods

This community based cross sectional study was carried out in the Colombo District in the Western Province of Sri Lanka. The Colombo District extends over an area of 696 square kilometers with a population of 2,310,135 and 77.5% are urban, 22.2% are rural and 0.4% are estate.[11] In Sri Lanka categorization of Urban, Rural and Estate is based on the local government body identified as Municipal Councils (MC) and Urban Councils (UC) and Pradeshiya Sabhas. Urban area is defined as MC and UC. Colombo District include all three kinds of local government bodies. The metropolitan area of city of Colombo is under the jurisdiction of Colombo Municipal Council (CMC) and differs from the rest of the urban areas in respect to population density.[12] Two thirds of Colombo city residents live in slum and shanties without basic amenities.[13] In this study, the focus was only on Public Health Midwives serving the socially marginalized communities in CMC area.

All consenting PHMs who had worked at least 6 months during the last 12-months period in Colombo district were selected. Data were collected over a period of five months (January - May 2015) using a self-

developed, validated, pretested self-administered questionnaire. Questionnaire consisted of demographic characteristics, questions related to knowledge and attitudes among PHMs' in relation to vaginal discharge and their competencies in health education in respect of hygienic practices and changing bahaviours among females. Further questions were inquired on PHMs' daily teaching activities, education environment and support. To assess the level of knowledge, each correct answer was given a score of 1 and incorrect response 0. Knowledge levels were specified as follows, Adequate knowledge - >75% Moderate knowledge between 50%- 75% and Inadequate knowledge <50%.[14]

Ethical clearance was obtained from the Ethics Review Committee of the Faculty of Medical Sciences, University of Sri Jayewardenepura. Permission to undertake this study in Colombo district was obtained from Regional Directorate of Health Services, Colombo and Chief Medical Officer of the CMC area. Data collection was carried out after obtaining informed written consent of the participants.

Data were analyzed using Statistical Package for Social Sciences (SPSS) software version 16 and descriptive statistics were applied to obtain percentages and means and then relevant inferential statistics. Variations of PHMs' mean knowledge scores and effect of associated factors were tested using ONE WAY ANOVA.

Results and Discussion

A total of 56 PHMs participated in the study with a response rate of 82%. Mean age of the study participants was 36.57 years (SD± 10.10). Majority of the participants were more than 30 years old (62.5%, n=35) and have worked as a PHM for less than 10 years (67.7%, n=38). Mean years of working as a PHM was 9.05 (SD± 9.07) (Table 1). 67.9% of PHMs expressed that their most common place of performing health education is during home visits. The most common topics used in their health education were family planning (85.7%), pregnancy (82.1%), and early childhood development (75%). They were engaged in health education on other disease conditions and their consequences (33.9%) and personal hygiene (14.3%) showing the interest on health promotion activities at the community level.

Total knowledge score for each participant was calculated by summing up the scores for correct answers. Mean knowledge score among the study participants was 53.7 (SD ± 12.36). One participant had an adequate level of knowledge on vaginal discharge and 51.8% (n=29) had moderate level of knowledge. Forty six percent of the study participants (N=26) had inadequate knowledge on vaginal discharge indicating nearly half of the study sample is having inadequate level of knowledge (Table 1).

There was no significant association between duration of working (p=0.329), level of education (p=0.584) and age (p=0.311) with the mean knowledge score within the study sample. Findings of other studies show that Community Health Workers' knowledge score in maternal health care is different in different age groups.[15] Especially Community Health Workers in young age groups have had good level of knowledge with age group of 20-25 and 26-30 having knowledge scores of 87.6% and 87.7% respectively as against those who are above 41 year of age having knowledge score of 77.1% percent.[15] But still the findings were not significantly different which is similar to the present study.

The PHMs who agreed for the knowledge statements were shown in the Table 2. There was adequate knowledge on some areas in the knowledge questions. The major areas that the PHM's lack knowledge in the present study were on reproductive tract infections and possible causes for pathological vaginal discharge.

Table 1. Baseline sociodemographic characteristics (n=56)

Variable		n, %
Age	Less than 30 years	21 (37.5)
	31-40 years	18 (32.1)
	More than 41 years	17 (30.4)
	Mean age	36.57 years (SD±10.10)

Duration of working as a PHM	Less than 5 years	25 (44.6)
	6-10 years	13 (23.1)
	More than 11 years	18 (32.1)
	Mean duration of working as a PHM	9.05 years (SD± 9.07).
Place of performing health education	During home visits	38 (67.9)
	At clinics	15(26.8)
	At PHM office	3 (5.4)
Common topics used for health education	Family Planning	48 (85.7)
	Pregnancy	46 (82.1)
	Early childhood development	42 (75)
	Immunization	30 (53.6)
	Newborn care	30 (53.6)
	Breastfeeding	28 (50)
	Well-women clinic	25 (44.6)
	Other disease conditions and their consequences	19 (33.9)
	Personal Hygiene	08 (14.3)
Knowledge levels	Adequate knowledge (>75%)	1 (1.8)
	Moderate level of knowledge (50-75%)	29 (51.8)
	Inadequate knowledge (<50)	26 (46.4)
	Mean knowledge score	53.7 (SD±12.36).

Tong (2008) highlighted that maternity care providers with high knowledge and attitude scores consistently discussed and recommended more than those with medium and low summary scores indicating the importance of knowledge levels in order to practice well.[16]

Nearly thirty percent of participants (n=17) agreed that they have received training on "Health Education" during the last five years. They mentioned the training on health education on following topics: Nutrition (3.6%, n=2), HIV education (1.8%, n=1), Family planning (5.4%, n=3), Breast feeding (1.8%, n=1), NCD's (12.5%, n=7). But no one has received training or in-service programmes related to reproductive tract morbidities after their basic training. Similarly, a study conducted in Sri Lanka related to adolescent sexual and reproductive health in Sri Lanka have found that 55% of health providers had not received reproductive health training in over 10 years.[1] Similarly, almost all Community Health care workers had previous training during their basic health training at schools than the post placement.[17] Fourteen participants rated their competency in health education on vaginal discharge as poor (25%), twenty six as average (46.4%) and eleven as good (19.6%) in the present study.

Table 2: PHMs' knowledge and attitudes regarding Vaginal Discharge (n=56)

Statements related to Knowledge on vaginal discharge	n	%
A clear, non-offensive discharge that varies with the menstrual cycle is a normal physiological secretion.	56	100.0
Vaginal secretions vary with menstrual cycle.	50	89.3
The most common cause of vaginal discharge is STIs.	16	28.6
Women aged between 15-49 years have a normal physiological vaginal secretion.	52	92.9
White or colored vaginal discharge may be a sign of reproductive tract infections.	42	75.0
Candida infection is a sexually transmitted infection.	34	60.7

Statements indicating positive attitudes	n	%
Educating females regarding vaginal health is very important.	54	96.4
Interested in getting knowledge about vaginal discharges and reproductive tract infections updated.	56	100.0
Educating females on vaginal discharge is one of our primary responsibilities.	56	100.0
It is necessary to take treatment for offensive vaginal discharge.	56	100.0
Any type of vaginal discharge should be taken seriously.	39	69.6
I am confident with my ability to teach about vaginal discharge.	36	64.0
Health education helps to promote health seeking behaviors among patients.	41	73.2

The attitude towards health education on vaginal discharge was positive among the study participants (Table 2). Majority indicated that health education on vaginal discharge is important. All participants agreed that they are interested in improving their knowledge about vaginal discharge and reproductive tract infections. Similarly, other studies have found that providers have requested up-to-date resources for health education and resources with proper guidance.[1]

Further they all agreed that it is one of their primary responsibilities to educate females on vaginal discharge in their PHM areas. Although there is no similar studies from literature, Tilahun, et al., (2012) stated that there is positive attitude by the majority of health care workers in Eastern Ethiopia, toward provision of reproductive health services to unmarried adolescents including content related to vaginal discharge.[18] Further Karol and Pattanaik (2014) stated that Community Health Workers have vital role in motivating women for availing postnatal care from the health centres.[15] This is similar to that PHMs who have a greater role in encouraging women for improving health seeking behaviors towards their reproductive and sexual health needs. Further they have highlighted that although there is no significant difference, with increasing age community health workers lose interest particularly in counseling eligible couples regarding family planning and HIV/AIDS.

PHMs engage in health education activities in the community as well as in clinics. Majority of the PHMs agreed that they discuss the female's vaginal health (91.1%), Educate the females regarding possible long-term health consequences related to untreated excessive vaginal discharges (91.1%), assess influence of the family background on personal hygiene (94.6%), assess influence of the home environment on personal hygiene (91.1), identify females at risk for reproductive health matters and educate them regarding prevention of disease (92.9%) (Table 3).

Table 3: present health education activities related to vaginal discharge

	n	%
Discuss the female's vaginal health	51	91.1
Use educational materials for teaching (eg. Pictures, cards)	41	73.2
Utilize family input when appropriate	34	60.7
Educate the females regarding possible long-term health consequences related to untreated excessive vaginal discharges	51	91.1
Provide opportunities for the female to discuss her feelings	48	85.7
Assess influence of the family background on personal hygiene	53	94.6
Assess influence of the home environment on personal hygiene	51	91.1
Health education activities are documented in a record	47	83.9
Identify females at risk for reproductive health matters and educate for	52	92.9

prevention of disease		

Although this indicates the present health education activities done by PHMs in the field on vaginal health and their role on promotion of vaginal health at the community level, there is a need of improving their knowledge on these areas. Similarly in a study on reproductive health services to adolescents, Tilahun, et al., (2012) empathizes the need of more training and awareness creation among the health care workers in Ethiopia so as to enhance their existing soft skills toward client interaction and attitudes toward reproductive health services to adolescents.[18]

Their major challenges for health education activities during field and clinic work were lack of available time (82.1%), lack of a good educational environment (80.4%) and lack of interest in learning by the community (82.1%) (Table 4). Similarly Dawson et al (2013) stated that health care providers including PHMs reported lack of funding, resulting in inadequate facilities such as counseling rooms and resources for awareness programmes.[1] Further they have found that adolescent shyness as a challenge in generating demand for services.

Majority of the PHMs indicated that continuing education services help them to improve confidence in ability to change health/ lifestyle (n=44, 78.6%), to improve knowledge of medical management of different diseases (n=21, 37.5%) and to educate the families with competency (n=16, 28.6%). 94.6% of PHMs said that they advise any women who complains of increased vaginal discharge to attend hospital gynaecological clinic.

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

	n	%
Working situation		
Lack of available time	46	82.1
Lack of a good educational environment in home (community) /clinic	45	80.4
Lack of teaching materials such as flash cards for health education	44	78.6
Lack of knowledge on vaginal discharge	38	67.9
Characteristics of 18-49years old females in the Community		
Lack of interest in learning	46	82.1
Existence of anxiety and Shyness in asking questions or revealing health problems	37	66.1

Nearly half of the sample were not satisfied about the available environment for health education (53.5%, n= 30). All PHMs agreed to participate in future health education sessions giving details of vaginal discharges, their management and personal hygiene if given the opportunity. Majority of the participants (n=45, 80.4%) rated that 'identifying difference between normal and abnormal vaginal discharge' as the first priority learning area in an educational programme. Other areas such as 'education for patients with vaginal discharge' (n=35, 62.5%), 'improving communication skills' (n=26, 46.4%) and 'methods of health education' (n=29, 51.8%) were rated as the second, third and fourth learning areas. The information and training needs of health workers are fundamental.[19] in order to address different health care needs within the public. Lack of proper knowledge could result in unnecessary or late referrals.[17]

Conclusions

Implementation of Primary Health Care Services in Sri Lanka is mainly served by the community level workers in various nomenclatures at the grassroots level for the improvement of maternal and child health care status. But presently their roles have been improved for the other health care needs of the community especially such as women's health. In the present study, the majority of PHMs displayed moderate level of knowledge regarding vaginal discharge which is not sufficient in providing proper health education and referral activities at community level.

Areas of weakness include recognition of abnormal vaginal discharge and common reasons for vaginal discharge suggesting more of theoretical knowledge. Although PHMs engage in health education activities for other disease conditions in addition to their routine health education for MCH, proper health education of females using appropriate teaching aids is by only half of the sample. Main challenges faced are: lack of available time, lack of a good educational environment, lack of teaching materials, lack of knowledge on vaginal discharge and lack of interest in learning by the community.

Majority of PHMs displayed the need of continuing education in order to, improve confidence in health education for women's common gynaecological complaints and identify females at risk for reproductive health matters.

Recommendation and Implications

Some of the suggestions which would effectively promote the participation of PHMs in the promotion of women's health care at the community level are: (i) PHMs need to be given health education training progamme to improve their health educational skills (ii) An educational programme on common gynaecological complaints including, identification of females at risk for reproductive health issues, teaching methods, communication skills for PHMs will help to render better services to the community. (iii) Refresher courses on common gynaecological complaints and how to differentiate normality may be useful in improving their knowledge and skills. Incorporating teaching methods and communication skills regarding vaginal health in to the PHM's training will help the community as health education is one of their major responsibilities.

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Competing interests

The authors have no conflicts of interest in this work.

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