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Research Article

Assessing knowledge of lady health workers regarding sexually transmitted infections in rural Pakistan

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ABSTRACT

Background: In a conservative culture with limited social mobility like Pakistan, a lady health worker (LHW) provides a valuable opportunity for women with STIs to be diagnosed early, referred for appropriate treatment, and can counsel regarding further prevention. The study was intended to assess LHWs knowledge regarding early assessment and referral of women with STIs in a rural area of Pakistan.

Methods: This descriptive cross sectional study was conducted at health centers in a district of interior Sindh, Pakistan called Badin. A sample of 105 lady health workers were recruited using systemic random sampling technique, during six months from September 2015 to March 2016. Data were collected through a semi-structured questionnaire and analyzed using IBM SPSS version 22 and Microsoft excel.

Results: Majority (29%) of LHWs were aged between 25 and 29 years. Half sample (51%) of LHWs were educated up to middle school and 6% were intermediate. Eighty-five percent respondents were married. More than half (59%) of LHWs were trained regarding STIs and 21.9% got the special training for it. Among them, 59% of respondents defined STIs correctly. Two thirds (67.6%) of participants knew the meaning of safe sex. One third (37%) of sample was aware of complications due to STIs during pregnancy. Two fifth of LHWs (40%) stated to refer the women with suspected STIs to the hospital for confirmation and further intervention. Near half of LHWs (48%) recommended the use of condom for prevention.

Conclusions: The current study concludes that there are gaps in knowledge of LHWs regarding STIs which makes it unsatisfactory. Therefore in service periodical sensitization and advocacy workshops and trainings of these LHWs are recommended to fill information gaps, remove misinformation and provide quality information in a way that is linked to the women's reproductive health in Pakistan.

Keywords: Knowledge of LHWs, STIs, Rural women

INTRODUCTION

Pakistan is the second most populous Muslim-majority country. Religious and social ethics are highly admired and deeply ingrained in the Pakistani society. Many people in Pakistan are severely disadvantaged in terms of income, education, power structure, or gender. The majority of the population, 69%, is rural. Poverty is widespread 31% of Pakistanis subsist on US\$1 per day,

and 85% earn less than US\$2 per day. All these factors are compounded by cultural practices. Pakistan is a male-dominated society, and prejudice against women is reflected in the higher female mortality rate and low literacy rate. This combination of factors gives rise to strong negative repercussions on health of women.¹⁻⁵ To make things worse, reproductive tract infections (RTIs) in many cases are asymptomatic among women, making their detection and diagnosis difficult. Uninfected women

are more susceptible to acquire an infection from infected male partner than an uninfected male from an infected woman. Despite grave consequences, policy makers and health planners in developing countries have not given much attention to these infections. In part, it is due to the misconceptions that RTIs are not fatal, are expensive to treat, and that they affect only a particular segment of population, such as commercial sex workers.⁶ RTIs are of demographic significance as they are intertwined with safe motherhood, family planning and child survival. These consequences range from less serious to fatal outcomes for the maternofetal health, such as, premature delivery, low birth weight, still births, congenital syphilis, neo-natal conjunctivitis, neurological and cardiovascular diseases, PID, infertility, and ano-genital cancers, specifically cervical cancer.⁸ These consequences could be particularly confounding in most developing countries where woman's status in the society, and even within the family, is usually dependent on her fertility.

Not all sexually transmitted infections (STIs) are reproductive tract infections, nor are all reproductive tract infections sexually transmitted but most of the STIs lead to RTIs. These infections represent a major global health problem leading to morbidity, mortality and stigma. Control of STIs has been given priority since the advent of the HIV/ AIDS epidemic, in recognition of their role in facilitating the sexual transmission of HIV.^{1,9,10} Timely healthcare seeking by individuals and appropriate case management can reduce the duration of infectivity in sexually active individuals and are, therefore, important determinants of STI control.¹¹⁻¹³ In Pakistan, as in many other low-income countries, case management for STIs is usually sub-optimal due to rampant personal empiricism and inappropriate practices.¹⁴⁻¹⁷

In a conservative culture with limited social mobility, a community health worker provides a valuable opportunity for women with STIs to be diagnosed early referred for appropriate treatment, and can counsel regarding further prevention. Community health workers are the backbone of the primary health care.¹⁸ In our country, community health workers are known as Lady Health Workers (LHW) and are working under the National Program for Family Planning and Primary Health Care. It was launched in Pakistan in 1994.^{19,20} This program was designed to provide health services to the community at their doorsteps. The importance of LHWs in the field of health cannot be overlooked because they are the solitary means of house-to-house access of health system for the provision of basic health care because of their acceptability.²¹ Hence it is very important to study whether they are capable of delivering the required services. With this backdrop the present study has been carried out to assess their knowledge regarding STIs for early assessment and referral of women with STIs.

METHODS

A quantitative approach using a descriptive survey design was chosen for the study.

The instrument

A semi-structured questionnaire was developed following an extensive literature review on the topic which ensured validity and reliability of the questionnaire. The socio-demographic details included the age of LHWs, qualification and marital status. Other variables were regarding the assessment of knowledge of the participants, which was assessed through 21 questions included identification of types of STIs, prevention, safe sex and their source of knowledge etc.

Subjects

The participants were recruited using systemic random sampling technique. All 105 lady health workers working at Health Centres in a district of interior Sindh, Pakistan called Badin, during six months from September 2015 to March 2016, and who were willing to participate, were included in the study.

Pilot

A pretest of the questionnaire was conducted with ten LHWs who met the inclusion criteria. The purpose of the pilot was to test the clarity and relevance of the questionnaire. The responses from the pilot study were checked for completeness and consistency by the principal investigator. In order to avoid response biases, the participants in the pilot study were not included in the main survey.

Validity and reliability

The questionnaire was developed in English first and its content validity was assessed by two co-investigators. Then it was translated into Sindhi, the local language of Badin, and validated by co-researchers. Five data collectors were trained by the principal investigator for data collection. The reliability of the instrument was tested using Cronbach's coefficient alpha, and the overall consistency of the instrument was found to be 0.61.

Ethical considerations

Informed verbal consent was obtained prior to each interview. Participation was voluntary and no coercion was used in the data collection process. Respondents were fully informed of the nature of the study and the use of the data. They were free to withdraw from the interview at any stage or refuse to answer any particular question. Participants were also ensured of confidentiality. No personal identifying information was obtained for any part of the investigation.

Data analysis

After completion of data collection, each questionnaire was checked for completeness and consistency by the principal investigator before entering the data. The data were entered and analyzed using, Microsoft Excel and IBM SPSS VERSION for Windows 22.0 software.

RESULTS

Table 1: Descriptive statistics of respondents (n=105).

Age category	Frequency	Percent
25-29 years	30	28.6
30-34 years	29	27.6
35-39 years	14	13.3
40-44 years	16	15.2
45-49 years	11	10.5
>50 years	5	4.8
Educational status	Frequency	Percent
Middle school	54	51.4
Metric	45	42.9
Intermediate	6	5.7
Marital status	Frequency	Percent
Married	89	84.7
Divorced	7	6.7
Widowed	5	4.8
Separated	4	3.8
Total	105	100

Table 2: Knowledge of STIs (n=105).

Definition of STIs		
Response	Frequency	Percent
Infection and sexual transmission	62	59%
Genital infection	10	9.5%
Some sort of infection	15	14.4%
Don't know	8	7.6%
Didn't answer	10	9.5%
Source of Information regarding STIs		
Response	Frequency	Percent
Got special training	23	21.9%
A part of official training	62	59%
Media	20	19.1%
Knowledge of safe sex		
Response	Frequency	Percent
Yes	71	67.6%
No	34	32.4%
Knowledge about complication of STIs during pregnancy		
Response	Frequency	Percent
Yes	39	37.1%
No	63	60%
Don't know	3	2.9%
Total	105	100

Table 1 shows the demographic profile of the study participants. A total of 105 lady health workers were interviewed. Majority (29%) of LHWs were aged between 25 and 29 years. Education level of the majority (51%) LHWs were up to middle school and only 6% were intermediate. Eighty-five percent respondents were married.

The data organized in Table 2, discloses that 59% of LHWs conveyed that they were given information regarding STIs including its signs/symptoms, discharge and examination, during their official training for health workers while 21.9% claimed to get the special training for it. Among them, 59% of respondents defined STIs as sexually transmitted infection, 9.5% identified it as a genital infection and 14.4% said they are some sort of infections without specifying it. Almost Two thirds (67.6%) of participants understood the meaning of safe sex. Only one third (37%) of sample was aware of complications due to STIs/RTIs during pregnancy.

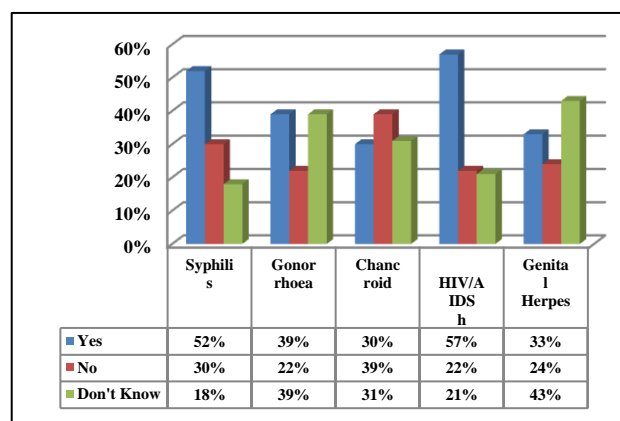


Figure 1: Infections Identified as STIs by respondents (n=105).

Figure 1, reveals that more than half of the sample (57%) had good knowledge about HIV/AIDS, 52% respondents had knowledge about Syphilis, 39% knew about gonorrhea while chancroid and genital herpes were known by 33% and 30% LHWs respectively.

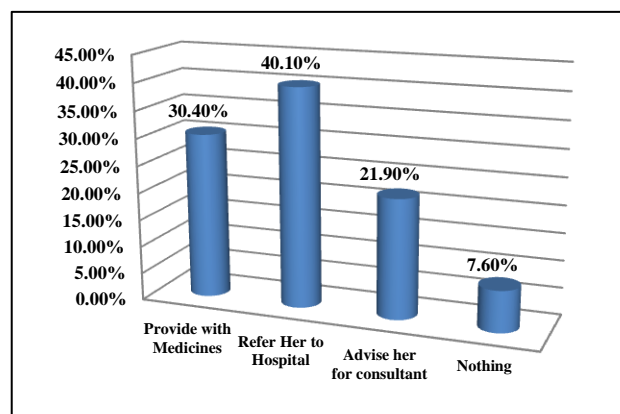


Figure 2: Handling of STI patient (n=105)

Two fifth of LHWs (40%) stated that they would refer the women with suspected STIs to the hospital for confirmation and further intervention, while 30% were of the opinion that the suspected STI patient should be given medicines at their door without delay, 22% said they have to advice the patient to consult some consultant specialized in STIs in the vicinity and 8% of LHWs said there is no need of any intervention as STIs are not harmful for health Figure 2.

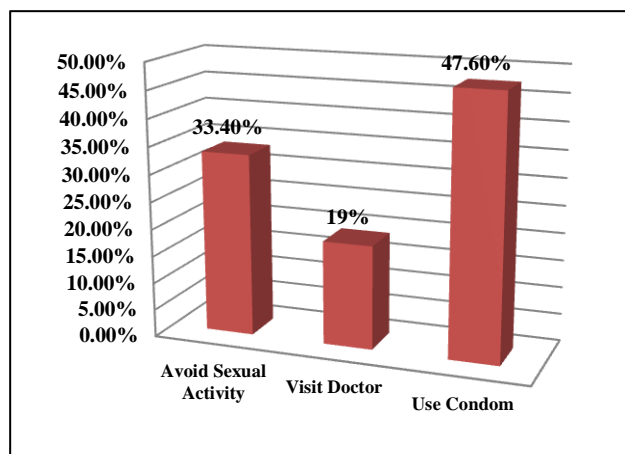


Figure 3: Prevention of STI (n=105).

Nearly half of all LHWs (48%) stated, they would recommend the use of condom to prevent the transmission of STIs among women, 33% insisted on avoidance of sexual activity while 19% supported the idea that all ladies who are really concerned should visit their doctors Figure 3.

DISCUSSION

To provide awareness on prevention and control of HIV/AIDS and STDs is one of the stipulated tasks of LHWs.²² The present study has been carried out to assess their knowledge regarding STIs for early assessment and referral of women with STIs in a rural area of Pakistan.

Recruitment of LHWs is followed by 15 months of basic training at the first level care facility (basic health unit and rural health center) or tehsil headquarter hospital, by the staff working over there in two phases, using Programme training manuals and curriculum. The first phase of basic training is of five days a week for three months. The second phase of training lasts for 12 months with three weeks of field work followed by one week of classroom training each month. The basic training of the LHWs is complemented by one day "continuing education session" each month and 15 days "refresher training" on various topics every year.²² According to the findings of our study 59% of LHWs stated that they were educated regarding STIs including its signs/symptoms, discharge and examination, during their official training for health workers and 21.9% claimed to get the special training for it but apart from 59% of respondents who

correctly defined STIs as sexually transmitted infection, rest were unable to define STIs. Almost two thirds of participants understood the meaning of safe sex. Only one third of sample was aware of complications due to STIs/RTIs during pregnancy. Our data shows, more than half of the sample had good knowledge about HIV/AIDS and syphilis, 39% knew about gonorrhea while chancroid and genital herpes were known by 33% and 30% LHWs respectively. There are studies on sexually transmitted infection care in Pakistan from the providers' perspective but unfortunately there is paucity of data of evaluation of LHWs regarding their serves in connection to STIs in women of Pakistan.²³ So the findings of current study cannot be compared with any data of similar health issue. External evaluation in the year 2009 shows that LHWs' clinical knowledge has enhanced since the 3rd Evaluation, however, there is still room for improvement.²⁴

Two fifth of sample LHWs stated that they would refer the women with suspected cases of STIs to the hospital for confirmatory tests and proper treatment, while rest had different opinions. Nearly half of the LHWs stated, they would recommend the use of condom to prevent the transmission of STIs but the other half sample was not sure about the proper preventive measures. The LHW's serve as a link between community and health facilities, providing both preventive and curative care.^{24,25} LHW's are an vital resource for countries like Pakistan, and maintaining procedural standards and guidelines would facilitate a thriving programme, which requires to be monitored and evaluated. First evaluation of this program was carried out in 1995. According to that report, 83% LHWs were having good knowledge regarding preventive activities. The second evaluation of this program was carried out in 1996; according to which 96% LHWs had established their health houses. Majority of lady health workers were found to be satisfactory in providing maternal care.²⁶ The third report was initiated in 1999 and completed in 2002. It was carried out by Oxford Policy Management, UK. It demonstrated that the performance of about 17% of LHW's was poor and 35% were below average.²⁷

The inadequacies demonstrated through our study are very sensitive flaws and are very essential ones too, that are required to be addressed. The low level of knowledge displayed in case of STIs/RTIs can be rectified by additional extensive trainings in this regard to strengthen the capabilities of LHWs to promote reproductive health among Pakistani women specially the rural women.

The limitations of this study were participation in the study was voluntary so the data gathered for this study may not be generalized.

CONCLUSION

There are gaps in knowledge regarding STIs among LHWs which emphasize on further in-depth training to

improve their abilities and for subsequent guidance of the women with suspected STIs. Therefore in service periodical sensitization and advocacy workshops and trainings of these LHWs are recommended to fill information gaps, remove misinformation and provide quality information in a way that is linked to the women's reproductive health in rural areas of Pakistan.

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