International Journal of Community Medicine and Public Health
Anamika et al. Int J Community Med Public Health. 2026 Jul;13(7):3460-3466
https://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040

DOI: https://dx.doi.org/10.18203/2394-6040.ijcmph20262235

Original Research Article

Effectiveness of self-care interventional package in promoting sexual health among female sex workers registered with selected NGOs of Chandigarh

Anamika[1]*, Sushma Kumari Saini[1], Bhim Singh[1], Sandeep Mittal[2], Manmeet Kaur[3]

[1]National Institute of Nursing Education, Postgraduate Institute of Medical Education and Research, Chandigarh, India
[2]State AIDS Control Society, Chandigarh, India
[3]Department of Community Medicine and School of Public Health, Postgraduate Institute of Medical Education and Research, Chandigarh, India

Received: 02 June 2026
Accepted: 20 June 2026

***Correspondence:**
Anamika,
E-mail: anamikasaroya@gmail.com

ABSTRACT

Background: Female sex workers who receive money and goods in exchange for sex They multiple sex partners and hence are vulnerable population and is highly susceptible for acquiring sexually transmitted infections with HIV. Such vulnerability may result in poor sexual health of the female sex workers.
Methods: A randomized controlled trial was conducted for the promotion of sexual health among FSW registered with NGO. Randomization was done by lottery method. Interviews were conducted with Interview Schedule for baseline assessment and interventional package administered to experimental group. End-line assessment was conducted to assess the effect of selfcare interventional package.
Results: After implementation of self-care interventional package there was improvement in knowledge and reduction in unsafe sexual practices.
Conclusions: The self-care interventional package was effective in improving sexual health.

Keywords: FSW, HIV, STI, Sexual health, Self-care interventional package

INTRODUCTION

Sex work has been described as the world's oldest profession. It has been practiced from ancient times and still practiced in modern culture. The tradition of sex work has been practiced in India since 2nd century as Nagarvadhus–"Brides of Town" was a tradition followed in some parts of ancient India. In 7th century particularly in some Southern parts of India sex workers were known as Devdasis (Temple prostitutes). During the Mughal period in the 19th century sex workers were known as Tawaif (Mujra dancers) which later renamed to Kothewalis. These women once ruled the nation with their seductive glances are now condemned as female sex workers.[1] In 2012 it was estimated that there are 40 to 42 million sex workers in the world. In 2007 the Ministry of women and child development reported the presence of over 3 million female sex workers in India, with 35.57 % are indulged into sex work and aging less than 18 years. According to WHO globally female sex workers are more likely to have HIV 13.5% more than other women and in Asia female sex workers are having almost 30% more likely to be living with HIV than other women.[2,3] On the top of it they are not accepted by the society and are stigmatized. This hinders them getting tested for HIV and STIs. They do not seek health care from health care professionals even if symptoms of STI are present and keep on suffering silently. This is harmful not only for themselves but also for their clients and their contacts which is ultimately spreading infection to the society and

impairing their sexual health due to multiple sexual contacts and unsafe sexual practices at large.[3,4] "Sexual health is a state of physical, mental and social wellbeing in relation to sexuality. It requires a positive and respectful approach to sexuality and sexual relationship as well as the possibility of having pleasurable and safe sexual experiences, free from coercion, discrimination and violence" (WHO). Sexual health is seen in terms of the prevention of unfavorable results of sexual behaviour like unwanted pregnancy and STIs. It requires the positive and respectful approach to sexual relationships. For the proper sexual health maintenance, the sexual rights of sex workers must be respected and protected and selfcare should be promoted as due to social discrimination that hinders themselves for getting treated if they are having symptoms of STI/RTI.[5,6] For making the FSW sexually healthy it is important to promote their sexual health by making them self-reliant. It is possible by educating them to learn self-care to be sexually healthy. Self-care to achieve sexual health are the group of activity performed by FSW to promote health, prevent, manage and limit the sexually transmitted diseases. Self-care activities if learned properly can be practiced independently.[6,7,8] So it is the responsibility of Community health nurses and other health care Professional working in community to provide self –care education to female sex workers to enhance their capabilities and make them self-efficient. Hence a need is felt to develop and implement a self –care interventional package for female sexual workers to improve their sexual health.

METHODS

A Cluster randomized controlled trial was conducted to assess the effectiveness of 'self –care interventional package' on promotion of sexual health of female sex workers. The study was conducted in two Non governmental organization (NGO) centers working in collaboration with State AIDS Control Society (SACS), Chandigarh from October to December 2020. SACS is working with many NGOs in Chandigarh to protect vulnerable population from HIV/AIDS under Target Intervention (TI) project. The target groups are MSM, FSW, transgender, migrants, truckers and IDUs etc. Two NGO shaving the FSW as one of the target groups were chosen for study i.e. Indian public health association (IPHA), PGI, Chandigarh branch having center at Indira colony Chandigarh and Family planning association of India (FPAI), Chandigarh having center at DadduMajra Colony, Chandigarh. Under this Project to protect FSW from STI/HIV, they are educated for safe sex practices such as use of condom while having sex; regular medical examination after every three months to detect STI and RTI; VDRL and HIV testing after every 6 months to detect syphilis and HIV infection. Ethical approval for the study was obtained from the Institutional Ethics committee of PGIMER, Chandigarh with reference number NK/6006/Msc/301 on 18-03-2020.The trial was registered under the Clinical trials registry India with the CTRI no. CTRI/2020/06/026133. Permission is taken from President IPHA, SACS and FPAI. Two NGOs were randomized by lottery method in experimental and control group. IPHA, Indira Colony, Chandigarh taken as experimental group and FPAI, DadduMajra Colony, Chandigarh as control group. Total 120 participants i.e 60 for the experimental group and 60 for the control group were selected from two NGOs by using purposive sampling technique i.e. the participants visiting NGO center during study period were enrolled. Tool and protocol were prepared after going through relevant literature and validated by experts in the field of nursing and school of public health. Tool included Interview schedule comprised of :Socio demographic data, sexual practices and sexual health, knowledge related to STI/HIV, symptoms related to STIs, knowledge related to Ca breast, knowledge related to ca cervix, symptoms related to Ca cervix protocol (essential package on sexual health) was prepared in the form of the flash book and booklet to provide information related to promoting sexual health of FSW. Protocol included colorful pictures of sign and Symptoms of STIs and self-assessment of genital area and breast self-examination, risks of cervical cancer and preventive measures for STI and HIV. Tool and protocol were validated by the experts in school of public health and nursing.

Baseline data was collected by interviewing participants as per interview schedule. Informed written consent was taken from the participants. The participants were educated and counselled using a self-care interventional package by face-to- face interaction with the help of flash book. Booklet was given to participants for ready references. They were motivated to get vaccinated against Hepatitis B, HPV and cervical cancer screening through Pap smear. Emphasis was given for routine self-genital checkup and self-breast examination. After implementation of self-care interventional package, weekly follow up was done to motivate them to adhere to safe sexual practices. The effectiveness of self-care package was assessed after one month for end line assessment by interviewing them by using interview schedule to assess the sexual health of FSW in both the groups. After end-line assessment of control group each participant was given one-to-one teaching with the help of flash book. Booklet (essential package on sexual health) was given to them for ready references.

RESULTS

Table 1 describes the socio-demographic profile of FSW in the experimental and control group. FSW in both groups were in age range of 20 to 40 yrs with mean age of 30.95±6.06 years in the experimental group and 30.11±6.14 in control group. Most of participants in experimental group (78.5%) and in control group (78.3%) were married. One third female sex workers (31.7%) in both the group had no informal education.

Table 1: Socio demographic profile of FSW of control and experimental group.

Variables	Control group (n=60) f (%)	Experimental group (n=60) f (%)	X2/Fisher's exact value (DF) p value
Age (in years)			
Less than 20	4(6.7)	3(5.0)	
21-25	13(21.7)	10(16.7)	1.66(4) 0.79
26-30	17(28.3)	19(31.7)	
31-40	26(43.3)	28(46.7)	
Marital status			
Single	5(8.3)	7(11.7)	
Married	47(78.3)	47(78.3)	5.630[b] 0.230
Divorced	3(5)	4(6.7)	
Widowed	5(8.3)	2(3.3)	
Educational status			
No formal education	19(31.7)	19(31.7)	
High school	24(40.0)	36(60)	16.42[b] 0.003*
Higher secondary education	16(26.7)	4(6.7)	
College degree	1(1.7)	1(1.7)	
Living area			
City	53(88.3)	42(70)	6.75[b] 0.019*
Village	7(11.7)	18(30.0)	
Religion			
Hindu	48(80)	41(68.3)	
Muslim	1(1.7)	11(18.3)	11.67[b] 0.007*
Sikh	10(16.7)	7(11.7)	
Christian	1(1.7)	1(1.7)	
Current living status			
Living alone	7(11.7)	11(18.3)	
With husband	17(28.3)	22(36.7)	3.4590[c] (4) 0.484
Within laws	19(31.7)	17(28.3)	
With lover	7(11.7)	4(6.7)	
With parents	10(16.7)	6(10)	
Main occupation			
Housewife	40(66.7)	37(61.7)	
Student	2(3.3)	1(1.7)	
Private company staff	3(5)	3(5.0)	4.57[b] 0.637
Domestic servant	6(10)	9(15.0)	
Government staff	--	1(1.7)	
Others (parlour, tailor)	9(15.0)	9(15.0)	

[b]Fisher's exact test, [c]Chi square test, *p value significant at<0.05.

Table 2: Comparison to assess the impact of self-care interventional package among FSW at baseline and end-line assessment.

Variables	Base line		X2 (DF) P value	End line		X2 (DF) P value
	Control group (n=60) F (%)	Experimental group (n=60) F (%)		Control group (n=60) F (%)	Experimental group (n=60) F (%)	
Sexual activity with condom (in last one month)	10 (16.7)	13 (21.7)	6.29 (2) 0.43	13 (21.7)	40 (66.7)	30.0 y (3) <0.001
Practicing weekly self checkup of genitals and anal area. Of STIs after treatments	1 (1.7)	5 (8.3)	2.80 (1) 0.09	2 (3.3)	44 (73.3)	62.1 (1) <0.001

Continued.

Variables	Base line		X2	End line		X2 (DF)
Practicing monthly breast self-examination	5 (8.3)	6 (10.0)	0.10(1) 0.75	8 (13.3)	57 (95.0)	80.5(1) <0.001
Taken treatment after any abnormal vaginal discharge	2 (3.3)	4 (6.7)	0.70 y (1) 0.40	3 (5.0)	7 (11.7)	1.74(1) 0.18
Had PAP test	8 (13.3)	9 (15.0)	0.06(1) 0.79	9 (15.0)	27 (45.0)	16.4(1) <0.001
Tested for STI	46 (76.7)	49 (81.7)	0.45(1) 0.50	50 (83.3)	57 (95.0)	4.22(1) <0.04
Taken vaccine for hepatitis B	6 (10.0)	8 (13.3)	0.32(1) 0.57	8 (13.3)	33 (55.0)	23.1(1) <0.001

Table 3: Comparison of knowledge of FSW regarding STIs, HIV/AIDS, CA breast, CA cervix at baseline and end-line assessment (n=120).

Variables	Base line		X2 (DF) P value	End line		X2 (DF) P value
	Control group (n=60) F (%)	Experimental group (n=60) F (%)		Control group (n=60) F (%)	Experimental group (n=60) F (%)	
Knowledge related to STI						
Good knowledge	2(3.3)	4(6.7)	0.28(2	3(5.0)	57(95.0)	97.5(3) <0.001
Some knowledge	17(28.3)	16(29.6)		17(28.3)	2(3.3)	
Poor knowledge	41(68.3)	40(66.7)	0.86	39(65.0)	1(1.7)	
Knowledge related to HIV/AIDS						
Good knowledge	2(3.3)	4(6.7)	0.83(2)	4(6.7)	58(96.7)	97.4% (2) <0.001
Some knowledge	52(86.7)	49(81.7)		10(16.7)	1(1.7)	
Poor knowledge	6(10.0)	7(11.7)	0.65	46(76.7).	1(1.7)	
Knowledge related to CA breast						
Good knowledge	3(5.0)	3(5.0)	2.03(3)	2(3.3)	57(95.0)	103.8(2)
Some knowledge	4(6.7)	6(10.0)		7(11.7)	3(5.0)	<0.001
Poor knowledge	53(88.3)	51(85.0)	0.56	51(85.0)	0	
Knowledge related to CA cervix						
Good knowledge				0	59(98.4)	114.0(2)
Some knowledge	1(1.7)	3(5.0)	1.03(1)	2(3.3)	1(1.7)	<0.001
Poor knowledge	59(98.3)	57(67.0)	0.30	58(96.7)	0	

Most of (88.3%) them in control group and 70% in experimental group were living in cities. Two third of FSW in experimental group (68.3%) and 80% in control group were followers of Hindu religion. One third (36.7%) of them in experimental group and 28.3% in the control group were living with their husband. More than half of the participants in experimental group (61.7%) and in control group (66.7%) were housewives. FSW in experimental and control group were comparable in terms of age, marital status, their current living status and their main occupation (as per Chi square p>0.05). However as per educational status, living area and religion both groups were not comparable. Table 2 represents comparison of safe sex practices among FSW at baseline and end-line. Baseline assessment analysis shows that most of them in both the groups tested for STI i.e. 76% in control and 85% in experimental group. Very few participants were practicing safe sex such as sexual activity with condom (16% in control group and 21.7% in experimental group). While after intervention significantly higher percent of participants (66.6%) experimental group adopted safe sex practices as compared to control group (21%) (p value<0.01). Very few participants in both the groups were practicing sexual health promoting activities such as weekly self-genital check-up (1.7% in control group and 8.3% in experimental group), monthly breast self-examination (8.3% in control group and10.0% in experimental group), pap smear test (13.3% in control group and 15.0% in experimental group), participants tested for STIs (76.7% in control group and 81.7% in experimental group), Taken vaccine for hepatitis B (10.0% in control group and 13.3% in experimental group). There was no significant difference between these two groups at baseline. While after intervention, significantly higher percent of participants started practicing sexually health promoting activities as compared to control group (p value<0.01) i.e. weekly self-genital check-up (3.3% in control group and 73.3% in experimental group), monthly breast self-examination (13.3% in control group and

95.0% in experimental group), PAP smear test (15.0% in control group and 45.0% in experimental group), participants tested for STIs 83.3% in control group and 95.0% in experimental group), taken vaccine for hepatitis B (13.3% in control group and 55.0% in experimental group).

Table 3 describes the knowledge level of FSW. During the baseline assessment there was no significant difference in the knowledge level of FSW regarding STI/HIV, CA breast, CA cervix and sexual practices in experimental and control group. After the implementation of self-care interventional package there was significant improvement in the knowledge level of FSW regarding STI/HIV, CA breast and CA cervix ($p<0.01$). More than 90% of the participants in experimental group answered correct most of the statements on the STI/HIV, CA breast and CA cervix during end-line assessment.

DISCUSSION

FSW are the vulnerable population for getting infected with STI/HIV. They face social discrimination and stigma.[9,10] Due to the judgmental attitude of the society, they remain away from accessing health care services. Some of the female sex workers even undergo sexual violence and forced to go for unsafe and forceful sex which impairs their sexual health.[11] Disequilibrium in the sexual health can lead to illness. FSW face various challenges to become sexually healthy.[10,11] Keeping this in mind a need was felt for capacity building of FSW for self-care. Hence the present study was undertaken to assess the impact of self-care interventional package (essential package on sexual health) on promotion of sexual health among FSW.

A Cluster randomized control trial design was used in the present study. This design was used as it provides data with minimum bias. Study setting was two NGO centers working in collaboration with Chandigarh State AIDS control society for welfare of female sex workers under Targeted interventions (TI) project to control HIV/AIDS in high-risk population. These two NGO centers were taken as study setting because it is difficult to approach female sex workers as they do not reveal their identity and under TI project the FSW are line listed with the NGO. The FSW are identified through peer approach in the project.

Data was collected by interviewing participants. The reason for using interview schedule among FSW was that it was easy to administer even in population with low literacy. In the Present study one third of female sex workers in both the groups were not having any formal education. This is similar to national survey (National behavioural surveillance survey 2006) that has shown that the 38 % of FSW had no formal education.

The protocol flash-book and booklet (essential package on sexual health) were prepared to promote sexual health. Coloured flash book with pictures were made to make it more attractive. Pictures were self-explanatory in the flash book and booklet so that it becomes easy for all the participants even with low level of literacy to understand the different aspects of sexual health. Education and counselling were given with the help of flash book by face-to-face interaction. With the help of flash book, the teaching became easier at the time of COVID 19 pandemic because education can be imparted by maintaining distance. The demonstration of steps of breast self-examination was given to participants and the return demonstration from the participant was taken to ensure the learning. As per the principal of learning "I hear and I forget, I see and I remember. I do and I understand" the demonstration and return demonstration are best methods to enhance learning. It was not possible to remember all the content in one session so, booklet was given to the participant for ready references and future use.[13]

One time teaching does not guarantee to improve sexual health, so three follow ups were done by the investigator by calling each participant of experimental group at NGO centreto reinforce and motivate the participants for promotion of sexual health by face-to face meeting. During each follow-up each study participants were motivated for the safe sex practices and their queries were resolved.

The present study findings reveals that during baseline assessment two third of FSW were having poor knowledge related to STI. Our results were different from the study performed by K ford study which reported 25% female sex workers are having less knowledge related to STI. About HIV/AIDS in the present study more than 70% of the participants are having some knowledge.[15,16,17] These results are different from the JTF Lau study which reported that 32% of FSW never used condom and having no knowledge related to spread of HIV/AIDS.[18] This may be because the FSW included in the present study are registered with the NGO and the NGO is providing preventive and curative services regarding HIV/AIDs to the registered FSWs. After implementation of self-care interventional package there was a significant improvement in the knowledge level of the female sex workers regarding STI, HIV/AIDS i.e. more than 90% of the participants were having good knowledge related to different aspects of STI and HIV, CA Breast and CA cervix. The results are similar to Donovan B study which reported 64.8% Female Sex Workers knowledge and quality of sexual health improved after implementation of self-care interventional package and Speilberg study.[19,20]

Breast cancer and CA cervix are the leading cause of morbidity and mortality among women. It is important for the FSW to be aware about the breast cancer, cervical cancer, there symptoms, how to do breast self-examination and importance of regular pap smear test. CA cervix is caused by STIs (HPV). Female sex workers are more prone to STI and Ca cervix. So, it is very

important for FSW undergo PAP smear test and have vaccination against HPV. The current study reveals that most of female sex workers (80%) having less knowledge related to breast cancer and 90% of the female sex workers are having less knowledge of CA cervix. The present study results are similar to the study by Dandash KF that more than half of the women have limited knowledge related to CA breast and CA cervix.[22] After implementation of self-care interventional package there was a significant improvement in the knowledge level of the FSW regarding CA breast and CA cervix. More than ninety percent of the participants were having good knowledge related to different aspects of, CA breast and CA cervix. The study results are similar to Mary P. Harmon study which reported that 50% of the participants are having knowledge and had PAP smear test and examination of breast.[23]

Unsafe sexual practices increase the risk of STI/HIV. The present study reveals maximum number of the participants in the present study were practicing unsafe sexual practices like having sex with multiple clients without condom (78.3%), not practicing self-genital checkup (96.7%) and not going for treatment after having any STIs (95.0%). Similar results are reported in Ma et al, study that reveals 50.5% FSW not using condoms with their multiple clients while having sex.[24] MF Cherish study reveals that 59.9% of the female sex workers having unsafe sexual practices.[26] After implementation of self-care interventional package There was significant improvement in adopting safe sex practices after the implementation of self-care interventional package. More than half of the FSW started practicing sexual activity with condom. More than 90% of the FSW started doing monthly breast self-examination and weekly self-genital checkup. Nearly half of the participants had PAP smear test and received vaccination against HPV and hepatitis B. The study results are similar to the Sun-j-Dong study which reveals that after interventions 40.8% of the FSW had HPV vaccine.[26]

There was a significant improvement in sexual health among FSWs after implementation of self-care interventional package ($p<0.05$). The improvement was reported in the use of condom, weekly genital self-examination, STI/HIV knowledge, regular medical examination apart from this their knowledge related to CA breast, CA cervix was improved and near about half of the participants had PAP test. Thus, null hypothesis was rejected and the alternate hypothesis was accepted.

CONCLUSION

The study concluded that self-care interventional package is effective in promotion of sexual health among FSWs. On the basis of finding, it is recommended for community health nurse, health care physician and NGOs staff can use this package for all the high-risk group population to promote their sexual health and make them self-efficient.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee (CTRI/2020/06/026133)

REFERENCES

1. Suresh G, Furr LA, Srikrishnan AK. An assessment of the mental health of street-based sex workers in Chennai, India. J Contemp Crim Justice. 2009;25(2):186-201.
2. Ghose T, Swendeman D, George S, Chowdhury D. Mobilizing collective identity to reduce HIV risk among sex workers in Sonagachi, India: the boundaries, consciousness, negotiation framework. Soc Sci Med. 2008;67(2):311-20.
3. Campbell C, Mzaidume Z. Grassroots participation, peer education, and HIV prevention by sex workers in South Africa. Am J Public Health. 2001;91(12):1978-86.
4. Dandona R, Dandona L, Gutierrez JP, Kumar AG, McPherson S, Samuels F, et al. High risk of HIV in non-brothel based female sex workers in India. BMC Public Health. 2005;5:87.
5. Rou K, Wu Z, Sullivan SG, Li F, Guan J, Xu C, et al. A five-city trial of a behavioural intervention to reduce sexually transmitted disease/HIV risk among sex workers in China. AIDS. 2007;21(8):S95-101.
6. Globerman J, Mitra S, Gogolishvili D, Rueda S, Schoffel L, Gangbar K, et al. HIV/STI prevention interventions: a systematic review and meta-analysis. Open Med (Wars). 2017;12:450-67.
7. Steen R, Chersich M, Gerbase A, Neilsen G, Wendland A, Ndowa F, et al. Periodic presumptive treatment of curable sexually transmitted infections among sex workers: a systematic review. AIDS. 2012;26(4):437-45.
8. Delvaux T, Crabbé F, Seng S, Laga M. The need for family planning and safe abortion services among women sex workers seeking STI care in Cambodia. Reprod Health Matters. 2003;11(21):88-95.
9. Argento E, Reza-Paul S, Lorway R, Jain J, Bhagya M, Fathima M, et al. Confronting structural violence in sex work: lessons from a community-led HIV prevention project in Mysore, India. AIDS Care. 2011;23(1):69-74.
10. Platt L, Grenfell P, Fletcher A, Sorhaindo A, Jolley E, Rhodes T, et al. Systematic review examining differences in HIV, sexually transmitted infections and health-related harms between migrant and non-migrant female sex workers. Sex Transm Infect. 2013;89(4):311-9.
11. Sriwanthana B, Hodge T, Mastro TD, Dezzutti CS, Bond K, Stephens HA, et al. HIV-specific cytotoxic T lymphocytes, HLA-A11, and chemokine-related factors may act synergistically to determine HIV resistance in CCR5 delta32-negative female sex workers in Chiang Rai, northern Thailand. AIDS Res Hum Retroviruses. 2001;17(8):719-34.

12. Silverman JG. Adolescent female sex workers: invisibility, violence and HIV. Arch Dis Child. 2011;96(5):478-81.
13. Wirtz AL, Pretorius C, Beyrer C, Baral S, Decker MR, Sherman SG, et al. Epidemic impacts of a community empowerment intervention for HIV prevention among female sex workers in generalized and concentrated epidemics. PLoS One. 2014;9(2):e88047.
14. Fonner VA, Kerrigan D, Mnisi Z, Ketende S, Kennedy CE, Baral S. Social cohesion, social participation, and HIV-related risk among female sex workers in Swaziland. PLoS One. 2014;9(1):e87527.
15. Ramesh BM, Beattie TS, Shajy I, Washington R, Jagannathan L, Reza-Paul S, et al. Changes in risk behaviours and prevalence of sexually transmitted infections following HIV preventive interventions among female sex workers in five districts in Karnataka state, south India. Sex Transm Infect. 2010;86(1):i17-24.
16. Steen R, Mogasale V, Wi T, Singh AK, Das A, Daly C, et al. Pursuing scale and quality in STI interventions with sex workers: initial results from Avahan India AIDS Initiative. Sex Transm Infect. 2006;82(5):381-5.
17. Ford K, Wirawan DN, Fajans P, Meliawan P, MacDonald K, Thorpe L. Behavioral interventions for reduction of sexually transmitted disease/HIV transmission among female commercial sex workers and clients in Bali, Indonesia. AIDS. 1996;10(2):213-22.
18. Lau JT, Tsui HY, Siah PC, Zhang KL. A study on female sex workers in southern China (Shenzhen): HIV-related knowledge, condom use and STD history. AIDS Care. 2002;14(2):219-33.
19. Donovan B. The AIDS Manual. In: Gold J, Penny R, Ross MW, Morey S, Stewart G, Donovan B, Berenger S, editors. The AIDS Manual. Sydney: MacLennan and Petty; 1994.
20. Spielberg F, Branson BM, Goldbaum GM, Lockhart D, Kurth A, Rossini A, et al. Choosing HIV counseling and testing strategies for outreach settings: a randomized trial. J Acquir Immune Defic Syndr. 2005;38(3):348-55.
21. Williams BG, Taljaard D, Campbell CM, Gouws E, Ndhlovu L, Van Dam J, et al. Changing patterns of knowledge, reported behaviour and sexually transmitted infections in a South African gold mining community. AIDS. 2003;17(14):2099-107.
22. Dandash KF, Al-Mohaimeed A. Knowledge, attitudes, and practices surrounding breast cancer and screening in female teachers of Buraidah, Saudi Arabia. Int J Health Sci (Qassim). 2007;1(1):61-71.
23. Harmon MP, Castro F, Coe K. Acculturation and cervical cancer: Knowledge, beliefs, and behaviors of Hispanic women. Women Health. 1996;24(3):37-57.
24. Sun J, Dong S, Gong J, Xie J, Yan H. Human papillomavirus vaccination willingness and influencing factors among women in China: a systematic review and meta-analysis. Prev Med Rep. 2025;58:103215.
25. Chersich MF, Luchters S, Blaauw D, Scorgie F, Honikman S, Loxton D, et al. Enhancing global control of alcohol to reduce unsafe sex and HIV in sub-Saharan Africa. Glob Health. 2009;5:16.
26. Perkins R. Working girls: prostitutes, their life and social control. Australian studies in law, crime and justice no. 7. Canberra: Australian Institute of Criminology, 1991. Available at: https://www.aic.gov.au/publications/lcj/lcj-7. Accessed on 02 May 2026.
27. Sex work is no crime. The Times of India. 2007. Available at: http://timesofindia.indiatimes.com/Opinion/Editorial/LEADER_ARTICLE_Sex_work_Is_No_Crime/. Accessed on 02 May 2026.

Cite this article as: Anamika, Saini SK, Singh B, Mittal S, Kaur M. Effectiveness of self-care interventional package in promoting sexual health among female sex workers registered with selected NGOs of Chandigarh. Int J Community Med Public Health 2026;13:3460-6.