

**Original Article**

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**Empowerment and engagement of SHG women against HIV/AIDS in India: an interventional study****Dr Manoj Kumar Gupta<sup>1</sup>, Mr Angan Sengupta<sup>2</sup>, Fehmida Visnegarwala<sup>3</sup>**<sup>1</sup>MD (Community Medicine), Assistant Professor, All India Institute of Medical Sciences (AIIMS), Jodhpur, India<sup>2</sup>PhD, Assistant professor, Institute of Health Management Research (IHMR) Bangalore, India<sup>3</sup>MD, MPH, AB (Int. Med. & Infectious Dis.), Visiting Professor for IHMR Bangalore and private practitioner in Houston, Texas, USA**Corresponding Author:**

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**ABSTRACT:**

**Background:** Lack of access to information and education makes women more susceptible to acquire HIV/AIDS. Self-help groups (SHGs) are seen as instruments for empowering women in the community. Realizing this, it was

hypothesized that if the strategy to train SHG women brings significant improvement in the knowledge of study population about HIV/AIDS; then this strategy may be a financially sustainable and practicable method in rural India.

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**Objective:** Empower and engage the SHG women against HIV/AIDS by creating awareness and sustaining interest through lesson plans in the IEC material.

**Methods:** This was a 'Multi-centric Action Research Demonstration Study'. As an intervention, series of workshops were conducted with the help of pre-developed IEC material. 400 households (200 from each intervention and control sites) of SHG women were interviewed for baseline and end line each.

**Results:** The planned intervention could make significant changes in level of awareness of the respondents about HIV/AIDS in terms of mode of spread, prevention and control measures and places to get tested for HIV/AIDS. This was also found effective to reduce the misconceptions regarding transmission of HIV/AIDS in the study area, thus in turn

### **Introduction:**

HIV is one of the world's leading infectious killer's, claiming more than 39 million lives over the past three decades.<sup>1</sup> In 2000, an historic step was taken by the global community in the United Nations Millennium Declaration by acknowledging the importance of an effective response to HIV/ AIDS and by placing it in the context

reducing the stigma attached with the disease.

**Conclusion:** The awareness level about HIV/AIDS in rural areas among SHG women was very low and there is an urgent need and scope for development and implementation of effective interventions strategy to train local community worker which in turn can bring improvement in the knowledge of community by providing the information in culturally acceptable manner.

**KEYWORDS:** HIV, AIDS, Health education, IEC, Self Help Group (SHG)

**Key Message:** This study provides experience of the efficacy and impact of health education interventions and an insight into the development and implementation of effective interventions against HIV/AIDS in India especially rural counterpart.

of the broader development agenda. This is time to assess and ameliorate accordingly our intervention efforts, as the 2015 deadline draws closer. Although the new HIV infections have fallen by 38% since 2001,<sup>2</sup> yet the HIV/AIDS epidemic continues to be a global tragedy. Karnataka is designated as one of the five

“high prevalence states” in the country and heterosexual transmission is primarily responsible for HIV transmission in the State.<sup>3</sup>

Biological construct of women makes them more susceptible and they are twice more likely to acquire HIV via a single act of unprotected heterosexual intercourse than men.<sup>4</sup> This situation further aggravated by their lack of access to information and education which is critical in the context of HIV/AIDS. Besides that, a 'culture of silence' prevails that inhibits women from exercising control over their sexual lives. Women also have poor access to health services as well. Many studies in India attribute the prevalence of HIV/AIDS to the low level of awareness of HIV/AIDS in women in general and rural women in particular.<sup>5-7</sup>

Considering the target specific interventions as important strategies of the National AIDS Control Programme, women can play a very important role in the prevention of HIV. Having knowledge about HIV/AIDS, especially married women can help them in protecting themselves and their children against it. Most HIV/STI prevention messages follow the hierarchical “ABC” model: at best, “abstain,” if that is impossible, “be monogamous,” or as a last resort, “use

condoms.” Since each of these options requires partner cooperation, success with the ABC strategy is unrealistic for many women. So, it is important to increase the awareness level of women regarding HIV/AIDS, its transmission, places to get tested for HIV/AIDS etc.

Health education is considered as ‘social vaccine’ and can serve as a powerful preventive tool. But, sustained behavioural change through education is a long-drawn process. Information, Education and Communication (IEC) tools are integrated into public health programs as a means to bring about changes in attitudes, perceptions and behavior of the community. Use of IEC material along with active participation by the community ensures delivery of appropriate information to people which in turn empowers them to make informed decisions about their health. But the current practice of health education by print and electronic media and wall paintings has limited impact due to low penetration and high illiteracy. A gender-specific and culturally tailored intervention may be more effective than a standard intervention at reducing the risk of HIV/AIDS over time. The local Health care workers in rural areas are the part of the existing health system and act as change agents in India. They are expected

to be the part of the health system and village for life long. So, the investment in their training and in turn communication of the acceptable information to the community may be a cost effective intervention strategy in long run. Wechsberg WM et al., (2004)<sup>8</sup> has suggested that the empowerment-based interventions tailored to develop concrete solutions within personal social contexts, more than standard interventions, can influence other life changes and facilitate independence among women.

### **Objective:**

To empower and engage the SHG women against HIV/AIDS by creating awareness and sustaining interest through lesson

### **Methods:**

The data used for this paper has been taken from the original study which was a 'Multi-centric Action Research Demonstration Study'. The study intended to sensitize, mobilize and engage SHG women as agents for generating awareness among village women on reproductive health, including cervical cancer, and to ensure behavioral changes towards hygiene in the community. The study was conducted for a period of one and half year

Self-help groups (SHGs) are seen as instruments for empowering women in the community. Realizing this, it was hypothesized that if the strategy to train SHG women brings significant improvement in the knowledge of study population in comparison of control group; then this strategy may be a financially sustainable and practicable method for health education on HIV/AIDS in rural India. So, this research work with a specially designed educational intervention was formulated with the following objective.

plans in the IEC material so that they can act as change agents for other women in the community.

(from May 2012 to October 2013). Initial three months was preparatory phase which was utilized for extensive literature search, designing and finalization of interview schedules, baseline data collection in the form of Household Surveys (HHS) and Focused Group Discussions (FGDs) and development of IEC material. Next one year was intervention phase in which series of workshops were conducted with the help of pre-developed IEC material to increase the awareness of SHGs members

regarding reproductive health. Last three months were utilized for end line survey by means of HHS and FGDs, data analysis and report writing.

Overall this multi-centric study was spread over five districts in 3 states namely Karnataka, Rajasthan and Chattisgarh. The Kolar district in Karnataka was the primary intervention site. From Kolar district an intervention taluk (Bangarpet) was selected from eleven taluks of Kolar District by simple random sampling. To establish an adequate counterfactual, a nearby taluk (Malur) with similar geographical, climatic, development and health indicators was selected as control by adopting purposive sampling. In both these taluks, quantitative evaluation using household surveys and qualitative evaluation with FGDs were done at baseline and end line. As an intervention, a total of fifteen workshops, each consisting three days, targeting 75 SHGS were conducted in Bangarpet taluk. Overall the sensitization was done with the help of local NGOs working in intervention sites. In Dharwad, Koppala, Jaipur and Raipur districts only qualitative evaluation using FGDs were done, and two workshops, each consisting three days, were conducted. This study consists of only quantitative data analysis of intervention district of Karnataka.

**Sample size:** As per the literature search and by assuming the minimum prevalence (50%) for awareness about HIV/AIDS among SHG women and considering 10% permissible level of error in the estimated prevalence, the sample size was calculated using the formula  $n = z^2pq/L^2$ . Thus the total sample size was “ $n = (1.96)^2 * 50 * 50 / (5)^2 = 384.16$ ”. This was rounded up and fixed to 400. Eventually, 400 households (200 from Bangarpet and 200 from Malur) of SHG women were interviewed for baseline and endline each. Study sample mentioned here is applicable for the main project also.

**Selection of Households:** There are 3 Community Mobilization Research Centres (CMRCs) in Bangarpet taluk (Kamsamudra, Topanahalli and Buddikotte) and 2 CMRCs in Malur taluk (Thoralakki and Dinnahalli). From each CMRC, 6 villages were selected by simple random sampling method. Thus a total of 30 villages were selected for the study. In the selected villages total enumeration of SHG women was done to prepare a sampling frame. The required study subjects for each taluk were selected adopting probability proportionate to size (PPS) sampling technique. In order to get required study subjects, simple random sampling was done.

The analysis was done in SPSS v16.0. The statistical significance was computed using the chi-square test for proportions and a p

value of <0.05 and <0.01 were taken as significant and highly significant, respectively.

### Ethical Approval

This study was approved by the ethical committee of Karnataka Institute of

Medical Sciences (KIMS), Hubli, Karnataka.

### Results:

The total number of households covered during baseline survey and end-line survey were 397 (200 in Malur and 197 in Bangarapet) and 401 (197 in Malur and 204 in Bangarapet), respectively. The mean age of the respondents during baseline survey and end line survey were around 31.4 years and 32.7 years, respectively and more than 95 percent of the respondents in both the taluks were currently married. More than 60 percent of

the respondents in Malur and around three fourth of the respondents in Bangarapet taluk were having nuclear family. A vast majority of the respondents were Hindus. With regard to caste of the respondents, more than 35 percent of the respondents belong to SC or ST and more than one fourth belong to OBC in both the taluks. More than 90 percent of the respondents have a ration card and almost all respondents in both the taluks belong to either BPL or extremely BPL category.

**Table 1: Socio-economic and demographic profile of the respondents**

Characteristics	Baseline		End line	
	Malur	Bangarapet	Malur	Bangarapet
	N(%)	N(%)	N(%)	N(%)
<b>Age</b>				
Less than 25 years	29 (14.5)	27 (13.7)	25 (12.8)	20 (9.8)
25-29 years	58 (29.0)	46 (23.4)	50 (25.6)	50 (24.5)
30-34 years	37 (18.5)	44 (22.3)	29 (14.9)	36 (17.6)
35-39 years	43 (21.5)	53 (26.9)	48 (24.6)	57 (27.9)
40 years and above	33 (16.5)	27 (13.7)	44 (22.1)	41 (20.1)
<b>Mean age</b>	<b>31.5</b> <b>SD=6.9</b>	<b>31.4</b> <b>SD=6.5</b>	<b>32.8</b> <b>SD=7.5</b>	<b>32.6</b> <b>SD=7.1</b>
<b>Marital status</b>				
Currently married	198 (99.0)	189 (95.9)	191 (97.0)	192 (94.1)

Others	2 (1.0)	8 (4.1)	6 (3.0)	12 (5.9)
<b>Type of family</b>				
Nuclear family	136 (68.1)	146 (74.1)	120 (61.1)	150 (73.4)
Joint/three generation	64 (31.9)	51 (25.9)	77 (39)	54 (26.6)
<b>Religion</b>				
Hindu	191 (95.5)	186 (94.4)	190 (96.4)	199 (97.5)
Others	9 (4.5)	11 (5.6)	7 (3.6)	5 (2.5)
<b>Caste</b>				
SC/ST	74 (36.9)	70 (35.4)	78 (39.6)	74 (36.3)
OBC	52 (25.8)	57 (28.7)	53 (26.9)	65 (31.9)
Others	75 (37.4)	71 (35.9)	66 (33.5)	65 (31.9)
<b>Has ration card</b>				
Yes	188 (94.0)	183 (92.9)	185 (93.9)	198 (97.1)
No	12 (6.0)	14 (7.1)	12 (6.1)	5 (2.5)
<b>Economic status*</b>				
BPL/extreme BPL	174 (87.2)	192 (97.3)	195 (98.9)	203 (99.5)
APL	21 (10.6)	4 (2.2)	2 (1.1)	0 (0.0)
Don't know	4 (2.1)	1 (0.5)	0 (0.0)	1 (0.5)
<b>Total</b>	<b>200 (100)</b>	<b>197 (100)</b>	<b>197 (100)</b>	<b>204(100)</b>

Even after so much awareness generation efforts since a long time by Government and by various NGO working on HIV/AIDS, during baseline survey it was shocking to found that just above half of the respondents in both Malur and Bangarapet taluks reported that they have ever heard about HIV/AIDS. The major sources of information about HIV/AIDS in the study area were TV (53.7%) followed by doctors (50.0%), Cinema (46.8%), Relatives and friends (46.8%), Radio (46.3%) and health workers (42.6%). The planned intervention could make a

significant ( $p < 0.01$ ) difference in awareness level of respondents about the HIV/AIDS in intervention taluks, and the corresponding percentages during endline survey in intervention and control taluk were 99 percent and 60 percent, respectively. Out of 202 SHG women in intervention taluk, who could develop awareness about HIV/AIDS through educational intervention, around 96 percent reported information transmission to happen through training provided during this project.

**Table 2: Awareness of SHG women about HIV/AIDS and the source of information**

Characteristics	Baseline			Endline		
	Malur	Bangarapet	p value/Total N (%)	Malur	Bangarapet	p value
	N (%)	N (%)		N (%)	N (%)	
<b>Ever heard about HIV/AIDS</b>						
Yes	103 (51.5)	113 (57.4)	p value = 0.241	119 (60.4)	202 (99.0)	<0.01
<b>Source of information on HIV/AIDS*</b>						
Radio	54 (52.4)	46 (40.7)	100 (46.3)	51 (42.9)	45 (22.3)	
T.V	78 (75.7)	38 (33.6)	116 (53.7)	96 (80.7)	154 (76.2)	
Cinema	61 (59.2)	40 (35.4)	101 (46.8)	78 (65.5)	9 (4.5)	
Newspaper/Book/Magazines	45 (43.7)	26 (23.0)	71 (32.9)	58 (48.7)	29 (14.4)	
Doctor	63 (61.2)	45 (39.8)	108 (50.0)	80 (67.2)	87 (43.1)	
Health Workers	60 (58.3)	32 (28.3)	92 (42.6)	86 (72.3)	60 (29.7)	
Husband	48 (46.6)	22 (19.5)	70 (32.4)	23 (19.3)	4 (2.0)	
Relatives/Friends	42 (40.8)	59 (52.2)	101 (46.8)	22 (18.5)	5 (2.5)	
Training during this project /SHG women	0	0	0 (0.0)	0 (0.0)	195 (95.6)	
Others	24 (23.3)	13 (11.5)	37 (17.1)	0 (0.0)	3 (1.5)	

\* indicates that the proportion was calculated out of those who have heard about HIV/AIDS

During baseline survey nearly 80 percent of SHGs women in Bangarapet taluk and more than 90 percent of SHGs women in Malur taluk, who were aware about HIV/AIDS, were also aware about any mode of transmission of this disease. The intervention was found to be effective in improving the awareness level (99.0%) of SHGs women regarding mode of spread of HIV/AIDS in intervention taluk. As far as the various modes of transmission of HIV/AIDS are concerned, the SHGs women were given education during

training session regarding HIV/AIDS transmission because of unsafe/unprotected sexual practices, infected mother to child, Transfusion of infected blood and Needle Sharing among IDUs. The effect of the education sessions were reflected in the form of improvements in knowledge regarding various modes of HIV spread in the intervention taluk. There has been a decline in the proportion of women from intervention taluk who possessed misconceptions that the spread of HIV can

be caused by mosquito/flea/bedbug bites and shaking hand, hugging, kissing and sharing food with HIV positive person, which highlights the stigma attached with this disease. Considering the selection of nearby taluk as control to match the socio-

demographic milieu and longevity of intervention (one year), some knowledge diffusion was observed in control taluk in the form of improvement in awareness as well as reduction in misconceptions about various modes of HIV transmission.

**Table 3: Awareness regarding transmission of HIV/AIDS**

Characteristics	Baseline			Endline		
	Malur	Bangarapet	p value/ Total N (%)	Malur	Bangarapet	p value
	N (%)	N (%)		N (%)	N (%)	
<b>Awareness about any mode of spread of HIV/AIDS*</b>						
Yes	95 (92.2)	90 (79.6)	<b>p value &lt;0.01</b>	109 (91.6)	200 (99.0)	<b>&lt;0.01</b>
No/DNK	8 (7.8)	23 (20.4)		10 (8.4)	2 (1.0)	
<b>Mode of spread of HIV/AIDS*</b>						
Unsafe/Unprotected sexual practices	75 (78.9)	76 (84.4)	151 (81.6)	103 (94.5)	198 (99.0)	
Infected mother to child	79 (83.2)	72 (80.0)	151 (81.6)	106 (97.2)	187 (93.5)	
Transfusion of infected blood	81 (85.3)	79 (87.8)	160 (86.5)	103 (94.5)	196 (98.0)	
Needle Sharing among IDUs	79 (83.2)	75 (83.3)	154 (83.2)	101 (92.7)	188 (94.0)	
<b>Opinion of the respondents regarding other mode of HIV transmission**</b>						
Shaking hand with HIV positive person	9 (8.7)	5 (4.4)	14 (6.5)	5 (4.3)	1 (0.5)	
Hugging with HIV+ person	10 (9.7)	4 (3.5)	14 (6.5)	5 (4.3)	1 (0.5)	
Kissing with HIV+ person	9 (8.7)	3 (2.7)	12 (5.6)	5 (4.3)	1 (0.5)	
Sharing food with HIV+ person	12 (11.7)	9 (8.0)	21 (9.7)	6 (5.2)	1 (0.5)	
Mosquito/Flea/Bedbug Bites	26 (25.2)	20 (17.7)	46 (21.3)	11 (9.6)	1 (0.5)	

*\* indicates that the proportion was calculated out of those who were aware about any mode of spread of HIV/AIDS*

*\*\* indicates that the proportion was calculated out of those who have heard about HIV/AIDS*

The results portray that there had been a considerable level of knowledge about prevention and control measures of HIV/AIDS in the study areas during baseline survey. More than 80 percent of respondents in Bangarpet taluk and near about three fourth of the respondents in Malur taluk, who have heard about HIV/AIDS, were also aware about any method to prevent HIV/AIDS transmission. Out of them, more than three fourth of the respondents reported for correct usage of condoms during sexual

intercourse and for tested blood for blood transfusion as the methods for prevention of HIV transmission during baseline survey. The intervention further significantly ( $p < 0.01$ ) improved the scenario during end line survey, and much convincingly in Bangarapet. Near about 85 percent of the respondents in both the taluks were aware about a place to get tested for HIV/AIDS, and out of them majority of the respondents from both the taluks were aware of public health facilities as HIV/AIDS testing centre.

**Table 4: Awareness regarding prevention and control of HIV/AIDS**

Characteristics	Baseline			Endline		
	Malur	Bangarapet	p value/ Total N (%)	Malur	Bangarapet	p value
	N (%)	N (%)		N (%)	N (%)	
<b>Awareness about any Method to avoid or reduce the chances of getting HIV/AIDS *</b>						
Yes	76 (73.8)	95 (84.1)	p value = 0.063	110 (92.4)	201 (99.5)	<0.01****
No/DNK	27 (26.2)	18 (15.9)		9 (7.6)	1 (0.5)	
<b>Opinion of the respondents to avoid or reduce the chances of getting HIV/AIDS**</b>						
Abstain from sex	28 (36.8)	61 (64.2)	89 (52.0)	67 (60.9)	63 (31.3)	
Using condoms correctly during each sexual intercourse	61 (80.3)	70 (73.7)	131 (76.6)	96 (87.3)	200 (99.5)	
Ask doctor to use tested blood for blood transfusion	62 (81.6)	79 (83.2)	141 (82.5)	105 (95.5)	197 (98.0)	
<b>Aware about any place to get tested for HIV/AIDS*</b>						
Yes	86 (83.5)	95 (84.1)	0.909	112 (94.1)	201 (99.5)	<0.01****
No	17 (16.5)	18 (15.9)		7 (5.9)	1 (0.5)	
<b>Places to get tested for HIV/AIDS***</b>						
Public Health facility	75 (87.2)	87 (91.6)		82 (73.2)	197 (98.0)	
Private health facility	1 (1.2)	1 (1.1)		0 (0.0)	2 (1.0)	
VCTC/ICTC	10 (11.6)	7 (7.4)		30 (26.8)	2 (1.0)	

*Note: \* indicates that the proportion was calculated out of those who have heard about HIV/AIDS*

*\*\* indicates that the proportion was calculated out of those who were aware about any Method to avoid or reduce the chances of getting HIV/AIDS*

*\*\*\* indicates that the proportion was calculated out of those who were aware about any places to get tested for HIV/AIDS*

*\*\*\*\*p value after fisher's exact test*

During baseline survey, near about one-fifth of the respondents in Malur taluk and nearly one-third of the respondents in Bangarapet taluk were aware about male condoms/Nirodh. Fifty nine percent of the respondents in Malur and three-fourth of the respondents in Bangarapet had perception that their husband knows about the place of purchasing condoms. During the intervention, the SHG women were explained about various barrier methods to prevent HIV/AIDS and their availability and accessibility. The effect of intervention was clearly reflected during

endline survey in the form of a highly significant ( $p < 0.01$ ) rise in the proportion of SHG women (99.5%) possessing knowledge about the male condoms, especially in the intervention taluk. Again some knowledge diffusion was observed in control taluk in the form of improvement in awareness about male condoms/Nirodh. Besides that, a considerable improvement was observed in the intervention taluk in terms of the proportion of women (75.4% to 92.1%) who responded that their husbands have knowledge about the place of purchasing condoms.

**Table 5: Awareness regarding male condoms**

Characteristics	Baseline			Endline		
	Malur	Bangarapet	p value	Malur	Bangarapet	p value
	N (%)	N (%)		N (%)	N (%)	
<b>Awareness of male condoms or Nirodh among the respondents</b>						
Yes	51 (25.5)	69 (35.0)	<b>0.039</b>	175 (88.8)	203 (99.5)	<b>&lt;0.01</b>
No	149 (74.5)	128 (65.0)		22 (11.2)	1 (0.5)	
<b>Awareness about the place of purchase of condoms/nirodh* among the husbands of the respondents</b>						
Yes	30 (58.8)	52 (75.4)	<b>0.054</b>	63 (36.0)	187 (92.1)	<b>&lt;0.01</b>
No	21 (41.2)	17 (24.6)		112 (64.0)	16 (7.9)	

**Note: \* indicates that the proportion was calculated out of those who have heard about male condoms**

### Discussion:

This study highlights that in parts of rural India the level of awareness related to HIV/AIDS and associated issues have been pretty low than the aggregate figures for entire India. However, this intervention study confirms that community awareness and engagement is the key to success for any health intervention program, and especially if the health problem is attached with any kind of social stigma.

In the present study, only about half of the respondents in both the intervention and control taluks reported that they have ever heard about HIV/AIDS, which is similar to the findings of a survey carried out by P V Kotech et al. (2008)<sup>9</sup> in urban slums of Vadodara. But this awareness level about HIV/AIDS is lower compared to reported figures by NACO in Behavioral Surveillance Survey (2006) report<sup>10</sup> and many other studies conducted in India<sup>11-14</sup>. The planned educational intervention could make a significant improvement in awareness level of respondents regarding HIV/AIDS in intervention area. Similar kind of improvements in knowledge about HIV/AIDS through educational interventions have been documented by

many other interventional studies.<sup>15-17</sup> The major sources of information about HIV/AIDS in the study area were TV followed by doctors, Cinema, Relatives and friends, Radio and health care workers, lends support to various other studies conducted in India.<sup>11-14,18</sup>

In the present study the baseline figures show that more than eight out of ten SHG women, who were aware about HIV/AIDS, were also aware about any mode of transmission of this disease. Similar kind of awareness level has been reported by Sarkar et al. (2007)<sup>12</sup> in a study conducted in Pondicherry. Transfusion of infected blood was documented as most common mode of HIV transmission in the study area, followed by needle sharing among IDUs, unsafe/unprotected sexual practices and mother to child. This finding presents a contradictory picture from few studies which report the knowledge that most common mode of HIV transmission is sexual act followed by needle and blood transfusion.<sup>9,18</sup> Present study revealed that still there are some misconceptions regarding the spread of HIV. Such kind of

beliefs and misconceptions have also been reported by many authors.<sup>14,17,19</sup> The planned health education intervention could successfully reduce these misconceptions in the intervention areas. Similar kind of significant impact of health education intervention in reducing beliefs and misconceptions associated with HIV/AIDS has been documented by Madhusudan M et al. (2014)<sup>17</sup> in Bangalore.

In the present study out of those who have heard about HIV/AIDS, near about 80 percent of respondents knew about any method to prevent HIV transmission. Suresh P, Asha B (2014)<sup>11</sup> have also reported the same level of awareness about prevention of HIV transmission in Belgaum City, Karnataka, but Pallikadavath S et al. (2005)<sup>20</sup> and Chetterjee N and Monawar GM (2006)<sup>21</sup> found lower level of awareness among rural women in the higher prevalence states of India. The overall knowledge regarding methods of prevention of HIV/AIDS was not up to the mark among SHG women in the study area, which is similar to the findings of many other studies<sup>17,22</sup>. A study conducted in Pune<sup>23</sup> showed that only 7 percent of the respondents knew the use of condoms to prevent HIV infection, which is very less in comparison to present study. Training

sessions were given regarding various preventive measures like using condoms correctly during each sexual intercourse, sex abstinence, ask doctor to use tested blood for blood transfusion etc. which could significantly improve the scenario in intervention area.

Regarding awareness about testing of HIV/AIDS, majority of the SGH women were considering public health facilities as HIV/AIDS testing centers. The knowledge about ICTC/VCTC was very minimal in the study area and also could not be improved by intervention also. The study conducted in Belgaum City, Karnataka, reported that nearly one-third of women were aware about ICTC services for HIV/AIDS<sup>11</sup> where—as a study conducted in Manipur<sup>24</sup> shows that, 58 percent of women were aware about PPTCT services.

Promotion of condom as an effective contraceptive tool and a protective measure against HIV/AIDS has been an integral part of the National Family Planning Programme for decades. However, in spite of so much awareness generation efforts since a long time, only near about one—fourth of the respondents in the present study were aware about male condoms/Nirodh. This finding is similar to the findings of a study conducted by Ravichandran N (2012) in Andhra

Pradesh<sup>25</sup>. Knowledge of place to purchase condoms and its availability is crucial to usage of condom. From the study, it is observed that out of those who know about condom, near about three fourth of the SHG women had perception that their husband knows about the availability and accessibility of condom. Ravichandran N

(2012)<sup>25</sup> observed in his study that over 90 percent of the population have informed chemist as the main source of availability followed by hospital /dispensary, irrespective of the study regions. However present study shows its limitation in exploring those areas.

### Conclusion and recommendations:

The awareness level about HIV/AIDS in rural areas among women is very low. The outputs of the planned intervention in the present study provide an insight that there is an urgent need and scope for development and implementation of

effective interventions strategy to train local community worker which in turn can bring improvement in the knowledge of community by providing the information in culturally acceptable manner.

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