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Health Training Programme for Adolescent Girls: Lessons from India's NGO Initiative

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Abstract

India at present is under going demographic transition in which the adolescents and youths constitute nearly half of the population. Although adolescence is a healthy stage of life, their sexual and reproductive health needs have taken center stage in India's public health policy debate because of greater vulnerabilities experienced especially by girls. Unlike the developed countries, India has very few targeted programmes for the benefit of the adolescents. The paper examines the impact of the initiative taken by an NGO -Self-Employed Women's Association (SEWA)-in Ahmedabad, a city in western India to impart knowledge about sexual and reproductive health and build skills that would be useful to make young girls financially independent and empowered. Quasi-experimental design was used for data collection among beneficiary and non-beneficiary households in two rural blocks and two cities of Gujarat. Non-beneficiary households from the same blocks and urban areas with similar socio-economic characteristics were selected as controls.

The study shows that the health training programme was quite popular among adolescent girls, especially in rural areas where on an average 15-25 girls attended them more or less regularly. While they learned about menstrual hygiene from the trainers, their household situation was not always conducive to allow them to practice what was taught. Girls were keen to learn about what is safe sex or how to deal if confronted with difficult boy-girl interaction. The study noted that the girls from control areas were not much different with respect to awareness about reproductive and sexual health compared to those who were exposed to training imparted by SEWA. The need to include discussion on issues on which young girls have many questions was evident and is therefore timely.

Any intervention to improve the conditions of adolescent girls cannot be limited to merely providing information about hygiene or giving additional nutritional supplement (as is done in the government centers), but it is important to create a space for them to express themselves. Also, there is a need for interaction with parents to make them sensitive towards health of their young girls and help them pursue their goals.

Keywords : Adolescent health, SEWA, health training, menstrual hygiene, contraception

JEL Classification : I100, I120, I190 and I310

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Introduction

Adolescence (10-19 Years) is an important stage of life for growth and development. It is a period of transition from childhood to adulthood and is marked by rapid physical, physiological and psychological changes. In India, according to 2011 Census, there are 243 million adolescents constituting 21 percent of population. Although adolescence is a healthy stage of life, many adolescents are not informed about or prepared for the changes that they undergo while growing up. In fact, they face a range of restrictions that stem from traditional social structure and taboos imposed by societal norms and culture, especially on girls (Jejeebhoy, 1998; Bott and Jejeebhoy, 2003). Social traditions and concern for the safety of girls make many Indian parents marry their daughters before the legal minimum age of 18 years and thereby deny them education, prevent them from exercising choice in matters affecting their lives and restrict their mobility. Girls become mothers when their bodies are not fully mature and emotionally they are not ready to handle responsibilities of motherhood.

According to India's National Family Health Survey-3 (NFHS-3) conducted in 2005-06, 15 percent of adolescent girls aged 15-19 years in urban areas and 35 percent in rural areas were married. A little over 58 percent of all married women were mothers or pregnant with their first child before the age of 18 years. Although adolescents do not experience many chronic or other diseases, some degree of undernutrition and anemia are not uncommon among them. According to the National Nutrition Monitoring Bureau (NNMB) report of 2006, adolescent girls and boys consume only 32–45 percent of the recommended daily allowance of iron and only two-thirds of the recommended calories, leading to high prevalence of undernutrition (Nutrition Foundation of India, 2006). A study from South Gujarat reported

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low body-mass-index among adolescent girls from poor families compared to those from well-to-do families. The same study also reported that the adolescent girls had higher prevalence of stunting and underweight compared to the boys of the same age (NIPCCD, 2008).

Several field based studies undertaken in India have reported that a significant proportion of adolescents are not aware of or know about biological processes of menstruation, reproductive tract infections and safe sex (Jogdanand and Yerpude, 2013; ITAP, 2012; Dasgupta and Sarkar, 2012; WHO, 2011; NIPCCD, 2008; Santhya and Jejeebhoy, 2007; Thakre, et al., 2011). At the same time the community intervention to impart sexual and reproductive health knowledge to adolescents does not result in changes in restrictions or their practices during menstruation. The rigid patriarchal social structure seldom helps to transform knowledge in better health practices (Nemade et al; 2009).

Until 2005 the few adolescent intervention programmes undertaken in India largely concentrated on providing knowledge of health but once girls got married they had very limited scope for rejoining the programme (Nanda et al; 2013). Also, most of the programmes did not have credible livelihood promotion component. The authors argue that a comprehensive approach for adolescent girls in India must include, along with sexual and reproductive health component, livelihood skills and ancillary support to transform the skills in gainful economical activities (ibid, pp. 24-27).

It is only in the last 15 years or so that such a need is recognized and some programmes are designed to provide, along with information and training on health issues, vocational skills for out of school girls. At national level in 2014, India launched a scheme for adolescents to address issues ranging from mental health, nutrition, substance misuse, gender based violence and non-communicable diseases. It aims to make community intervention through peer educators (RKSK; operational guidelines, 2014). A few non-government organizations (NGOs) have also launched such programmes in the areas where they have a presence. This paper is based on an evaluation of one such health-training programme conducted by an NGO in Gujarat state.

Objectives of the Study

Self-Employed Women's Association (SEWA), a voluntary organization of working women in rural and urban areas of Ahmedabad district in Gujarat state, has been engaged in life skill building and health training programmes for poor women and their adolescent unmarried daughters for several years.[1] The health training for adolescents is designed to help them make safe transition to adulthood by providing positive information about reproductive and sexual health. In 2013, we undertook a study to assess the impact of the health training on women and their adolescent daughters. Girls who received training were interviewed to assess the impact of the training in their knowledge and practices. Girls in a control area who were not exposed to such training were also interviewed. While interviewing the young girls enrolled in the SEWA's training programme, it was noted that not all girls, living in the area where health trainings were conducted, participated in the programme. So a three-way analysis was carried out that compared the knowledge of (1) those who participated, (2) those who did not participate in the training in spite of living in the same village or neighbourhood and, (3) those that lived in areas where no such programme was held. The study focused on, 1) girls' sanitary practices during menstruation, 2) experiences regarding the restrictions faced during their menstrual cycle, and 3) knowledge about contraception, Reproductive Tract Infections (RTI) and Sexually Transmitted Diseases (STDs).

Methodology and Selection of the Respondents

For imparting health training, SEWA formed groups with 20-25 girls in villages and urban neighbourhoods and the instructor held training sessions at least once in a month at a convenient place, not far from where girls resided. The training was provided to girls in the age group 12-19 by a female trainer. The trainer known as *sevika* received training on

[1] Besides health education, SEWA has been engaged in improving livelihood skills of young girls by providing technical skills to enhance their access to income generating opportunities. A study was carried out jointly by SEWA, Ahmedabad and Population council, New Delhi to study the impact of the intervention on young girls and a report titled '*Influencing Girl's Lives: Acceptability and Effectiveness of a Livlihood Skill Building Intervention in Gujarat*', was authored by S. Kalyanwala and a team of co-authors from both the organisations in 2006. The report is also available on the website of SEWA.

health issues from the supervisors of SEWA. The training included audio-visual materials, pamphlets as well as occasional lectures delivered by medical professionals.[2]

In both rural and urban areas the primary unit for sampling was the household with adult woman who is a SEWA member. Adolescent girls from these households who attended the training in the year 2011-12 (during the year prior to the survey) were selected for the study. Out of the four rural blocks in Ahmedabad district where SEWA conducted training, we randomly selected 20 percent of villages from two blocks (17 villages).[3] About half or nine control villages were selected from the same blocks having similar socio-economic profile as the experiment villages but were situated at least five kilometers away from those villages where SEWA conducted the adolescent training programme. Since SEWA mostly works with women from poor and disadvantaged group, the control group was also drawn from similar households after listing all the households in the villages. In the cities of Surat and Ahmedabad, SEWA maintains a list of the girls trained by them by location. We drew the sample from these lists following a random method. In Ahmedabad a sample of control group was drawn from localities similar to the experiment group but where SEWA did not engage in any activity or training. In Surat, where the SEWA programme was relatively new, due to several reasons beyond our control, it was not possible to have a control group of adolescent girls.

Data were collected with semi-structured questionnaire and five in-depth interviews and five focus group discussions. We decided to leave a few questions open-ended because pre-coding was not possible in view of a wide range of possible responses. In-depth interviews and focus group discussions were held after the survey and were conducted to gain in-depth

[2] SEWA provided training to adolescent girls on health, community health and hygiene, social and gender issues including on subjects such as HIV/AIDS and family planning. Self-defense was also reported as a component of training. However, no modules of the training were either systematically prepared or made available. It was unclear the extent to or depth in which the various listed topics were covered during the training.

[3] The two blocks were purposively selected. In one of the four blocks not selected, health interventions were started very recently. The other block was not selected because it is surrounded by Ahmedabad city on three sides and its proximity to the city implies that the residents of the villages would be quite urbanized.

understanding. It was possible that girls were freer to express their opinion in a group when issues were discussed generally and not specifically about any one particular person. The same set of questions was canvassed among all the three groups of adolescent girls. The survey tools was pre-tested and approved by both technical advisory group (TAG) and the ethics committee before being canvassed. The survey was carried out during October 2012-March 2013 with a trained team of female investigators. The quantitative data have been analyzed using SPSS 16.0 and Stata 13.0.

Since some of the questions posed to the young girls were quite sensitive in nature, the field investigators were trained to comply with confidentiality of information, not pressuring girls in answering all questions, if they chose to remain quiet, and not conducting interviews in the presence of other members of the family or neighbours. Prior oral consent was obtained from the respondents before conducting the interviews or holding focus group discussions. The field investigators were supervised throughout the data collection to ensure that the ethical considerations were adhered to.

As shown in Table 1, from a total of 1672 surveyed households (both in rural and urban areas in experimental and control arms of the study), we listed 493 adolescent girls in the rural and urban experiment area and 212 girls in the control area in the age group 12-19 years. Since the module on the adolescent girls was canvassed only among those girls who were available at the time of the field work; we could interview 82-84 percent of the girls. The remaining girls were not present at the time of the interview either because they were in schools or were temporarily away. From among those available at the time of survey, only about 45 percent of girls in rural households and only 20 percent of those in Ahmedabad city were enrolled in the health programme conducted by SEWA organization during year 2011-12. Since the programme typically enrolled about 25-30 girls in each class, not all the girls living in a village or urban locale could participate in the programme during the year. Also, some girls, in spite of having been approached by the health trainer, may have decided against joining the programme. In the control area, except in one selected village, no government or NGOs had conducted any health or skill development programme for adolescent girls.

Table 1: Selection of Adolescent Girls and Their Profile

SN	Item	Experimental area			Control area		
		Rural	Urban	Total	Rural	Urban	Total
1	Number of households	339	802	1141	231	300	531
2	Number of households with at least one adolescent girl	114	246	360	38	97	135
3	Number of adolescent girls aged 12-19 years	156	337	493	73	139	212
4	Total number interviewed	111	295	406	59	120	179
5	% interviewed (4 as % of 3)	71.0	88.0	82.0	80.0	86.0	84.0
6	Number attended health training programme	50	60	110	3	4	7
7	Of those interviewed, % attended health training programme (6 as % of 4)	44.9	20.3	27.1	4.8	3.2	3.9
8	% in age group 12-14	36.0	28.4	33.1	30.5	36.6	34.3
9	% in Age group 15-19	63.0	70.6	66.9	69.5	63.4	65.7
10	Average Age	15.3	15.7	15.4	15.5	15.3	15.4
11	Average age at menstruation	13.7	13.7	13.7	14.3	13.6	14.0

Source: Field Survey.

Nearly two-thirds of the adolescent girls were in the age group 15-19 years; rest were slightly younger between ages 12 and 14. The average age at menstruation of the girls was between 13 and 14 years.

Profile

As shown in Table 2, the percent of households belonging to scheduled caste and those belonging to other backward castes (which in Gujarat are termed as *Baxi Panch* castes) ranged between 97 and 92 percent in rural areas and 73 and 79 percent in urban areas.[4] In rural areas majority of the households owned their house; the percentage is somewhat lower in urban areas since some of the recent migrants to the cities are not in a position or do not have the capital needed to acquire own accommodation. Overall, nearly two third of the households did not live in *pucca* houses. But nearly three out of five SEWA members in urban areas lives in *pucca* houses[5].

[4] Since SEWA works with disadvantaged and marginalized communities, the sample has preponderance of households from these communities.

[5] A pucca house is one, whose walls, roof and floor are built with long lasting materials such as bricks, cement concrete, tiles, etc.

Practically every household even in rural areas reported having electricity within home. Also, 90 percent of households in urban areas had access to safe drinking water. On the other hand, while 95 percent of the SEWA beneficiary households in rural areas reported having access to safe drinking piped water, nearly 20 percent of the households in control areas relied on village wells for their water needs. Availability of toilet within the house was reported only by about half of the rural households but by 86 percent of beneficiary households and 61 percent of control households in urban areas.

Four out of five SEWA member households in urban areas used clean fuel for cooking but less than half of those in control areas used LPG or any other clean fuel. As to be expected, majority of the households in rural areas depended on smoke-generating agricultural waste as fuel for cooking. Only about a third of the marginalized households in rural areas owned any land. A higher proportion of mothers of the girls interviewed in control areas were illiterate compared to those who were beneficiaries of SEWA activities. On the other hand, as reported by the 2011 Census, ownership of television and telephone (mostly mobile phone) has become widely prevalent even in rural areas of Gujarat and the rural-urban disparities have virtually disappeared.

Table 2: Characteristics of Surveyed Households with Adolescent Girls

Characteristics of Households	Household in experiment areas		Households in control areas	
	Rural	Urban	Rural	Urban
No. of households	114	246	38	97
% of Scheduled Caste households	38.8	19.9	18.9	26.2
% of Other Backward Caste households	48.2	53.2	73.0	52.4
% of households owing home	98.8	79.7	97.3	78.6
% of households living in pucca house	47.1	61.0	37.8	28.6
% of households having electricity	98.8	98.7	97.3	98.8
% of households having safe drinking water	95.3	95.2	81.1	91.7
% of households having latrine with in home	54.1	86.1	40.5	61.8
% of households having clean fuel for cooking	20.2	81.3	5.4	40.5
% of households owning land	42.4	7.8	48.6	3.6
% of households having telephone/mobile	92.9	96.1	94.6	90.5
% of households having television	84.7	90.0	86.5	91.7
% of households having refrigerator	28.2	30.3	18.9	14.3
% of households owning two or three wheel vehicle	36.5	23.8	18.9	17.9
% of households owning four wheel vehicle	3.5	2.6	2.7	2.4
Average age of mother (in years)	33	37	41	38
Average no. of years of schooling of mothers	3.8	5.2	2.1	2.8
% of mothers illiterate	38.8	34.8	75.0	50.6
% mothers working as wage labourers	29.4	24.3	30.5	33.3

Source: Field Survey, the figures are for those households with at least one adolescent girl who participated in the interview.

Note : Rural areas of Ahmedabad district have hardly any tribal households.

Menstrual Hygiene of Adolescent Girls

All the adolescent girls were asked a few questions about the source of information about menstruation, personal menstrual hygiene, and restrictions on mobility during menstruation and support received from family, etc. The data presented in Table 3 points to two important findings. One, there were little differences in responses to most of the questions related to menstruation between girls who belonged to the beneficiary households,[6] whether they participated in the training programme or did not and those who lived in areas where no such training was conducted. Two, the rural-urban differences on the other hand, were large. What this suggests is that the household level influence on the knowledge, perceptions and behaviour of girls who are young and not empowered to take decisions, was stronger compared to what a brief training imparted by outsiders could achieve.

Mothers were the primary source of information about menstrual cycle for majority of the girls irrespective of whether they had attended SEWA's health programme or not or lived in control villages or urban areas. However, the rural-urban differences are worth noting. In both areas, while mothers were the major source of information, in rural areas, friends were reported as an important source of information for 9 to 19 percent of girls. SEWA programme was reported as a source only by 16 percent of rural girls but less than 5 percent of girls in urban areas. What is quite likely is that a large proportion of girls would have attained menarche before participating in the health education programme and so would have received the information about it from their mothers or other senior female members in the family.

[6] We have used the terms beneficiary households for those who participated in the various health programmes organized by SEWA. The term control group applies to those who lived in areas where SEWA did not have any programmes. Our effort was to select areas where interventions by any other organization were minimal or non-existent. However, in one control village another NGO had once conducted health training a few years earlier among adolescent girls.

Table 3 : Responses of Adolescent girls on Questions on Menstrual Hygiene

SN	Item	Girls living in areas where SEWA held Adolescent training programme				Adolescents in control areas	
		Those who attended training programme		Those who did not attend training programme			
		Rural	Urban	Rural	Urban	Rural	Urban
1	Number of girls interviewed*	50	60	61	235	59	120
2	Information on Menstruation provided by						
	Mother	59.5	62.0	58.3	57.3	56.3	73.6
	Sister	7.1	16.1	10.0	17.6	8.3	14.5
	Friend	9.5	5.4	15.0	10.5	18.8	6.4
	Teacher	4.8	5.4	3.3	7.1	12.5	2.7
	SEWA health Programme	16.7	3.6	3.3	0.8	2.1	0.0
	Other	2.4	7.1	10.0	6.7	2.1	2.7
3	Reason why menstruation occurs?						
	Don't know	47.5	62.5	66.7	63.4	69.2	67.7
	Physical process	52.5	37.5	27.5	34.5	30.8	32.3
	God's curse/ no answer	-	-	5.9	2.0	-	-
4	% facing problem in maintaining cleanliness	25.0	7.7	9.3	10.7	20.5	5.4
5	% use cloth	79.5	61.5	85.2	74.8	90.0	70.0
	% use sanitary napkins	11.4	38.5	5.6	24.3	10.0	30.0
6	Where do you dry cloth?						
	Inside house	0.0	24.3	4.2	26.5	10.0	-
	Out in sunlight	93.9	43.2	95.8	64.8	90.0	60.0
	No response	6.1	32.4	0.0	8.6	-	40.0

table contd...

SN	Item	Girls living in areas where SEWA held Adolescent training programme				Adolescents in control areas	
		Those who attended training programme		Those who did not attend training programme			
		Rural	Urban	Rural	Urban	Rural	Urban
7	Problems faced during menses						
	No problem	25.0	14.5	23.2	29.3	25.0	37.6
	Vomiting	0.0	1.6	1.4	2.8	2.5	6.5
	Pain in stomach	38.5	40.3	34.8	29.3	37.5	17.2
	Weakness	28.8	25.8	36.2	30.9	32.5	36.6
	Other	7.7	17.7	4.3	7.7	-	-
	No response	-	-	-	-	2.5	2.1
8	Restrictions during menses						
	No restriction	51.2	27.3	49.2	49.6	60.0	52.7
	Cannot participate in religious activity						
	Restriction on cooking	29.3	40.9	26.2	28.2	32.5	43.0
	Restriction on going out	24.4	30.2	24.6	22.2	7.5	2.2
		7.3	1.5	-	-	-	-

Source: Field Survey.

* Since these questions are sensitive, girls were free not to respond to any question. The number of respondents for individual questions varied, which are not shown separately.

Nearly two out of three girls who were not exposed to health training – whether living in the same villages or urban neighbourhood as those who were exposed to training and those living in control areas did not know why menstruation occurs. However, it was surprising that almost half of the rural girls and two out of three girls in urban areas exposed to health training also reported that they did not know why girls have periods. While menstrual hygiene including providing basic understanding that menstruation is a physical process was a component of the training, either the instructors did not discuss such issues in sufficient detail during training or the girls did not comprehend what was being discussed.

A slightly higher proportion of rural girls compared to their urban sisters reported that maintaining cleanliness was more difficult. While the differences are not large, it is possible that relative scarcity of water in rural areas as well as greater restrictions on girls might compromise their ability to ensure changing pads or cloth frequently, which might give a feeling of difficulty in maintaining cleanliness. Rural-urban differences were noted in the usage of cloth versus sanitary pads. In both beneficiary (whether participated in health training or not participated) and control areas of Ahmedabad city, use of sanitary pads was reported by 24 to 30 percent of girls, but only by 6 to 10 percent of rural girls. The pads have to be purchased from market and their cost may act as a deterrent for many households.

On the other hand, more than 90 percent of the rural girls who use cloth were able to dry it in open sunlight, thereby making it safer for reuse because exposure to sunlight helps in disinfecting it to some extent. In urban areas, a quarter of girls who used cloth had to dry it inside the house partly because of lack of access to open space. In slums the open space is sometimes shared with adjacent households inhibiting young girls to dry their menstrual cloth in the visibility of others.[7]

Almost a third of all girls regardless of their place of residence reported a feeling of weakness during menses. Only a quarter reported no problem. Weakness could be associated with their compromised nutritional status and therefore losing blood during menstruation may give a sense of weakness. On the other hand, nearly a third of all rural and urban girls also reported stomach ache during menstruation.

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[7] We were told that many girls, especially in Ahmedabad city who used cloth during menstruation, threw it away after single use rather than washing and reusing.

Nearly half of all girls (except those urban girls who had participated in health training) did not face any restrictions during their periods. This was true both in rural and urban areas. There were no restrictions on girls going out including to school. Within home, a quarter of girls in the beneficiary category faced some restrictions such as not allowed to enter kitchen or touching other members of the household. Such restrictions were imposed on a much smaller proportion of girls who lived in the control areas. It is difficult to explain this difference. Restrictions on visiting temple or participating in any religious activity were imposed on 26 to 43 percent of girls.

From the in-depth interviews of a few adolescent girls and in the focus group discussions with girls who had attended the training sessions organized by SEWA, it was evident that anatomy of female body and changes occurring while growing up, menstrual hygiene, need for consuming green leafy vegetables, importance of remaining healthy, were discussed and girls broadly remembered what was discussed. The girls also reported that the mode of training with charts, apron with drawings of reproductive organs that was put on one girl, etc. was quite effective in remembering the messages.

However, at the same time the girls indicated during focus group discussions that the wishes and opinion of parents were paramount and they could not easily alter their behaviour on the basis of what they learnt during the training. For example, two of the concerns articulated by most of the girls related to them not being allowed to continue their education and pressure on urgency in marrying them once they attained menstruation. They recognized that they had practically no decision making voice on these matters and would have to abide by the decisions taken by the parents or elders in the family. Along with health education, SEWA could take up these issues for dialogue with young girls as well as with their parents.

Knowledge about Unsafe Sex, Contraception and RTI

We asked all young girls about their knowledge and source of information on unsafe sex, contraception and reproductive tract infection. As shown in Table 4, on knowledge of these issues, the differences between the adolescents from beneficiary groups and from control groups were significant – a higher proportion of girls among both urban and rural beneficiary groups indicated that they knew about these issues compared to that in the

control groups. We did not probe on the specific knowledge they had and whether they had correct information.

Nearly a third of all girls who were interviewed, knew about unsafe or unprotected sex but interestingly almost 50 percent of them learnt about it either from their friends or from media such as television. It is possible that in spite of television being a powerful media, it is non-interactive and so what is stated or portrayed may not be fully comprehended or even wrongly understood by young girls. On the other hand, friends may discuss but share wrong information. SEWA trainers were reported as a source of such information only by 18 percent of rural girls and 30 percent of urban girls. During focus group discussions with girls, what is unsafe sex and its dangers came up repeatedly as of great importance for them. However, girls exhibited lack of correct knowledge on what is safe sex or unsafe sex. As articulated by one 15 year girl, '*when a girl becomes 15 year old, she should not look or smile at any boy. It can result in a 'mistake' which can mar the reputation of a girl*.' Clearly, girls have many apprehensions about whether to talk to boys, they have a fear of harassment, whether to discuss with parents if any demands have been made by boys. The girls were reluctant to talk to the parents because they were concerned 'about parents' reputation in the society'. These issues need to be sensitively discussed with girls along with providing education on personal health.

Almost two in five girls in the beneficiary group knew about contraception or had heard about methods to stop having children. Again, the major sources of information were mass media like television and radio and friends. In rural areas, SEWA's health training does appear to include some information on contraception, but not in their urban programme. In urban areas, 22 percent of girls reported school teachers as a source for information on contraception. Much lower percent of girls in the control area – both rural and urban - reported knowledge of contraception.

Table 4: Knowledge and Source of Information on Unsafe Sex, Contraception and Reproductive Tract Infections among Adolescents

SN	Item	Girls living in areas where SEWA held Adolescent training				Adolescents in control areas	
		Girls who attended training programme		Girls who did not attend training programme			
		Rural	Urban	Rural	Urban	Rural	Urban
1	**% who agree that unsafe sex is dangerous***	42.1	33.3	22.2	35.0	14.3	24.4
2	**Source of information**						
	Mother	3.7	18.5	20.0	15.8	0.0	15.2
	Sister	3.7	3.7	6.7	16.7	9.1	15.2
	Friend	29.6	22.2	46.7	24.2	18.2	18.2
	Teacher	22.2	11.1	6.7	25.0	36.4	18.2
	Adolescent Programme	18.5	29.6	0.0	0.0	0.0	0.0
	TV-Radio	22.2	11.1	20.0	17.5	36.4	33.3
	Others	0.0	3.7	0.0	0.8	0.0	0.0
3	**% who know about contraception**	44.7	41.7	24.4	41.4	21.4	19.3
4	**Source of information**						
	Mother	3.6	3.4	11.1	9.2	0.0	14.3
	Sister	10.7	3.4	0.0	4.2	26.7	23.8
	Friend	10.7	20.7	11.1	32.4	20.0	4.8
	Teacher	10.7	17.2	22.2	21.8	20.0	4.8
	Kishori/Other adolescent Programme	32.1	34.5	5.6	2.1	0.0	0.0
	TV-Radio	32.1	20.7	50.0	29.6	20.0	52.4
	Others	0.0	0.0	0.0	0.7	13.3	0.0
5	**% who know about RTI**	31.6	14.6	6.7	11.7	4.8	8.1

table contd...

SN	Item	Girls living in areas where SEWA held Adolescent training				Adolescents in control areas	
		Girls who attended training programme		Girls who did not attend training programme			
		Rural	Urban	Rural	Urban	Rural	Urban
6	**Source of information**						
	Mother	0.0	18.2	44.4	19.6	0.0	8.3
	Sister	0.0	0.0	0.0	4.3	33.3	16.7
	Friend	10.0	18.2	33.3	23.9	0.0	33.3
	Teacher	15.0	9.1	0.0	23.9	33.3	16.7
	Kishori/Other adolescent Programme	45.0	18.2	0.0	2.2	0.0	0.0
	TV-Radio						
	Others	25.0	27.3	22.2	23.9	33.3	25.0
		5.0	9.1	0.0	2.2	0.0	0.0
7	**% reported having any RTI in last one year**	2.8	8.5	0.0	2.5	0.0	0.0

Source: Field Survey.

* The girls were asked whether they knew that having unprotected sex and multiple sex partners can increase the risk of sexually transmitted diseases. However, a sizeable proportion of girls did not know this.

Adolescence years are healthy years of life and therefore either suffering from any reproductive tract infections (RTI) or even knowledge about them tends to be quite low as is evident from the responses of the girls. Girls were asked whether in the last one year they had experienced any menstrual irregularities, vaginal discharge, severe lower back ache or lower abdominal pain. The question was asked in terms of the main symptoms that girls were likely to experience. Three percent of rural girls and 8 percent of urban girls in the beneficiary areas reported having experienced some RTI and 31 and 15 percent of rural and urban girls respectively knew about RTI. Again, friends and mass media were the major source of information. However, interestingly, in rural areas, SEWA programme or training was reported as a source of information by 45 percent of all the girls. Apparently, the trainers in urban areas did not discuss what the various or common reproductive tract infections are or what causes them among young girls. The girls in the control areas tended to be by and large ignorant of RTIs.

Statistical Significance of the Intervention versus no Intervention

To ascertain whether the difference in knowledge or awareness about RTI, contraception and risk of unsafe sex; between adolescent girls who attended the health training programme and those who did not are statistically significant or not, a simple confidence interval test (CI) was carried out. The results are shown in Table 5. Two types of comparisons were made. For both rural and urban areas comparison was made between adolescent girls who attended health training programme and those who did not, although lived in the same area. It is shown as Comparison 1. Another comparison was made between adolescent girls who attended health training programme and those who lived in control areas and had no exposure to such programme, shown as Comparison 2. The comparison is done for groups within rural or within urban areas but not between rural and urban areas.

Table 5 shows that within rural areas the mean differences in awareness level of risk of unsafe sex and of benefit of birth control measures, are statistically significant but the level of significance is weak (at greater than 5% level), between girls who attended the programme vis-à-vis those who did not attend the programme (comparison 1 for rural areas). However, the mean difference in awareness about RTI is statistically

significant at 1 percent level between the two rural groups. On the other hand, the mean difference between rural girls who attended the programme and those who lived in control areas is statistically significant at 5% level for all the three indicators (comparison 2).

In urban areas there is no statistically significant difference in mean awareness among girls who attended the programme and girls who lived in the same neighbourhood but did not attend (comparison 1). With the exception of the birth control variable, the same was true also when the mean difference between girls who attended the programme and those living in control areas (comparison 2) was calculated. This suggests that there is no difference in the health awareness level of urban adolescents exposed to training and those not exposed to it. Very likely in urban areas media, particularly television, is a significant source of information for most girls including those exposed to health training. As shown in Table 2, more than 85 percent of all households in rural or urban areas owned television.

Table 5: Results of Confidence Interval Test for Sample Adolescent Girls

Awareness about	Group Difference (with Confidence Interval at 95% level)			
	Rural		Urban	
	Comparison 1	Comparison 2	Comparison 1	Comparison 2
Risk of Unsafe Sex	0.199 (0.003 – 0.397)*	0.278 (0.089 – 0.468)***	-0.017 (-0.166 – 0.132)	0.089 (-0.072 – 0.250)
Birth control measures	0.203 (0.001 – 0.405)*	0.233 (0.032 – 0.434)**	0.157 (-0.140 – 0.171)	0.231 (0.069 – 0.393)***
RTI	0.249 (0.084 –0.414)***	0.268 (0.107 – 0.429)***	0.029 (-0.080 – 0.139)	0.644 (-0.051 – 0.180)

Notes:

1) The material from Boston University of Public Health has been used for theoretical understanding and the application of the above test. (http://sphweb.bumc.bu.edu/otlt/MPH-Modules/BS/BS704_Confidence_Intervals/BS704_Confidence_Intervals_print.html).
2) Stata 13.0 version has been used for computation.
3) * refers to significance at more than 5% level, ** refers to significance at 5% level and *** significance at 1% level.

The lesson that we draw form the initiative of SEWA in imparting health training to adolescent girls is that the NGO has provided a platform to them both in rural and urban areas to come together with their peers. This is not always possible in marginalised rural communities because of

restrictive attitudes of parents and where girls are not allowed to go out or express themselves freely. Evidently, there was little difference between the various groups of girls in awareness or hygiene practices and so the impact of imparting health training appeared minimal. It signifies that interventions like the SEWA initiated training programmes with standard curricula alone are not sufficient to translate the knowledge into practices. Mere knowledge, though important, alone is not sufficient as an instrument of change for bringing about change in the health behavior of the adolescents in India. Perhaps, along with health training, programmes to impart livelihood skills which will help them to gain financial independence would go a long way to empower the young girls.

Conclusion

Overall, from the data collected through semi structured questionnaire and through in-depth discussions with some of the adolescent girls, it appears that SEWA's health education programmes for adolescent girls has been quite popular with them, especially in rural areas where on an average 15-25 girls attended the sessions more or less regularly. While they imbibed information on menstrual hygiene, on reproductive health, including family planning to a certain extent, their household situation was not always conducive to allow them to practice what was taught or answered all the questions and concerns they had. A strong need was articulated by girls during focus group discussions that some of the issues which baffled them and on which they needed evidence-based knowledge were what is safe sex, how to deal or handle if they are confronted with difficult boy-girl interaction. Although many of them attended school, they were not able to talk to their teachers. SEWA's interactions with young girls need to include discussions on such issues, which are on the minds of young girls.

It is often argued that intervention training programmes for adolescent girls need to be comprehensive and more broad-based and besides raising awareness and information, they must also endeavor to empower young girls by imparting some skills, which would help them gain some economic independence and agency. While recognizing that young girls have multiple needs, it has been noted that providing training or engaging girls in livelihood activities conflicts with their right to education (ICRW, 2013). While no systematic studies have been carried out to understand and estimate the extent to which girls drop out of school or become irregular after they have

learnt a livelihood skill. However, in another ongoing study in Ahmedabad slum areas, we have been informed that girls who received training in sewing and in mehndi applying and other beautification skills provided by an NGO and who became quite proficient in these, lost interest in going to formal school. They became irregular and eventually dropped out because earning some pocket money became lucrative. In the long run, this would not help in bridging the gender gap at secondary level of schooling.

The Indian Government's newly launched health programme for adolescents focuses on life-skill training and providing information on nutrition, reproductive health and substance abuse. The programme envisions "enabling all adolescents in India to realize their full potential by making informed and responsible decisions related to their health and wellbeing and by accessing the services and support they need to do so". UNFPA is collaborating with the Ministry of Health and Family Welfare of Indian Government to guide the implementation of the programme and develop a National Adolescent Health Strategy. The community based interventions under this programme will be implemented through peer educators. It is too early to assess the impact of the initiative. One however hopes that the lessons from various small-scale interventions including the role of peer educators are considered before scaling up such programmes at national level.

Finally, for a positive impact, such programmes must also include systematic dialogue with the parents about the varied needs of their adolescent girls. It is important to interact with the parents and make them aware about the growing up issues of their adolescent girls and help in their transition to adult life.

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