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ASHA Workers and Adolescent Health: An Explorative Study

Abstract

Introduction: Adolescents constitute around 1.2 billion population of the world. Despite the fact that adolescents represent almost one quarter of the Indian population, their health needs are poorly understood and ill served. ASHAs being front line workers may play a significant role in addressing adolescence health issues at community level.

Objective: To assess awareness and practices of ASHA workers regarding adolescent health issues.

Materials and Methods: A cross-sectional study conducted among 1650 ASHA workers in Sonapat District of Haryana who had gathered for a training session on adolescent health. Before the session, a questionnaire in local language was distributed to assess their understanding about adolescent health issues. Data was analyzed using SPSS software (version 17). Results were presented in simple proportions and means (\pm SD).

Results: Mean age (\pm SD) of ASHAs was 38.74 \pm 8.7 years. Maximum 1178 (71.4%) belonged to age group of 25-45 years. 1582 (95.9%) ASHAs were aware that adolescence age group was constituted by 10-19 years. 435 (26.4%) knew of anemia, 368 (22.3%) knew of vaginal discharge, 292 (17.7%) knew of menstrual problems as common problem in adolescence age group. 1297 (78.6%) reported condoms, 58 (3.5%) tubectomy, 139 (8.4%) oral pills as contraceptive methods for adolescence.

Conclusion: ASHA workers should be trained adequately about adolescence health issues so that continuum of care under RMNCHA plus can be achieved. Training should provide complete knowledge about the same.

Keywords: Adolescence, ASHA workers, India.

Introduction

Adolescence is the age group that ranges between 10 and 19 years and is a transitional stage of physical, physiological and psychological development from puberty to adulthood. Adolescents constitute around 1.2 billion population of the world, which means that roughly one in every six persons is an adolescent. Estimate says that about 21% of Indian population is adolescents which is roughly about 243 million.¹ The young age group carries a huge burden of disease worldwide. The total number of incident disability adjusted life years (DALYs) in those aged 10-24 years was about 236 million, representing about 15.5% of total DALYs for all age groups. DALY rates were 12% higher in girls than in boys between 15 and 19 years. Worldwide, the three main causes of years lived with disability (YLDs) for 10-24-year-olds were neuropsychiatric disorders (45%), unintentional injuries (12%), and infectious and parasitic diseases (10%). The main risk factors for incident DALYs in 10-24-year-olds were alcohol (7% of DALYs), unsafe sex (4%), iron deficiency (3%), lack of contraception (2%), and illicit drug use (2%).²

The main health issues faced by the adolescents are mental health problems, early pregnancy and childbirth, human immunodeficiency virus/ sexually transmitted infection and other infectious diseases, violence, unintentional injuries, malnutrition and substance abuse.¹

Evidence says that at least 12% of adolescents live with a chronic condition. Young people with chronic conditions are doubly disadvantaged since they are engaging in risky behaviors as their healthy peers, while having the potential for greater adverse health outcomes as well.³ Despite the fact that adolescents represent almost one quarter of the Indian population, their health needs are poorly understood and ill served.⁴

With a number of programs started by the Government of India like National Adolescent Health Program (*Rashtriya Kishor Swasthya Karyakram*), which is the component of Reproductive Maternal Neonatal & Child Health Plus Adolescent Program, the services have not reached the target group adequately because resources like materials, money and manpower are limited. Adolescent-friendly health services (AFHS)-based adolescent clinics are supposed to address all the healthcare needs of adolescents; the delivery of services mainly targets reproductive and sexual health and other issues are not adequately focused.¹

The role of community health workers (CHWs) in healthcare delivery is widening as they are considered inevitable to meet the universal healthcare provision and the millennium development goals.⁵ CHWs are defined as "community members who work almost exclusively in community settings and who serve as connectors between healthcare consumers and providers to promote health among groups that have traditionally lacked access to adequate care.⁶ Community health workers encompass a wide variety of local healthcare providers ranging from nurse-midwives to home-based care givers and salaried-staff to volunteers.⁷ The National Rural Health Mission (NRHM) was launched by the Government of India in 2005 to strengthen the healthcare delivery system. One of the most important components initiated was the introduction of a cadre of community health workers called Accredited Social Health Activist (ASHA) who acts as an interface between community and public health system.⁸

Adolescent health as a new issue was incorporated in reproductive and child health program under National Rural Health Mission. Teachers and grassroots-level health service providers, i.e., multi-purpose health workers (females/ males) are one of the key stakeholders who are to understand and respond to adolescent needs.⁹ ASHA training modules also have incorporated adolescence health issues like bodily changes, menstrual hygiene and roles and responsibilities of ASHA workers in helping adolescents in accessing healthcare services for contraception, reproductive tract infections, etc.¹⁰ ASHAs being

frontline workers may play a significant role in addressing adolescence health issues at community level. This study presents findings of a study conducted with objective to assess awareness and practices of ASHA workers regarding adolescent health issues.

Materials and Methods

Study Design and Participants

This was a cross-sectional study conducted among 2000 ASHA workers who came for training on adolescent health in Sonapat district of Haryana which was organized by administration in collaboration with Indian Association for Adolescent Health. A pre-tested questionnaire was distributed to all workers before the training session; however, 1650 ASHA workers returned their completed questionnaire.

Study Tool

A pre-tested, semi-structured self-administered questionnaire schedule was prepared in local language consisting of items on demographic profile including age and religion, marital status, caste and population served, etc. Questionnaire included items to assess their knowledge on adolescent health issues and practices followed in community.

The questionnaire was pilot-tested in a different setting for assessing its feasibility and reliability. Suitable modifications were done afterwards. Cronbach's alpha, which is a coefficient of internal consistency, was calculated which came out to be 0.82.

Statistical Analysis

Data was analyzed using SPSS software (version 17). Results were presented in simple proportions and means (\pm SD). Chi square test was applied to test significant difference between qualitative variables.

Ethical Issues

All participants were explained the purpose of the study and confidentiality was assured to them. A written informed consent was taken from the participants beforehand.

Results

Socio Demographic Profile

Table 1 shows socio demographic profile of ASHA workers. Mean age (\pm SD) of ASHAs was 38.74 ± 8.7 years. Maximum number of ASHAs (n=1178; 71.4%)

belonged to age group of 25-45 years. 1610 ASHAs (97.6%) were Hindus while only 40 (2.4%) ASHAs were from Muslim community. Majority (58.4%) of ASHAs were educated up to senior secondary school and most of them were married (92.2%). 108 (6.5%) belonged to other backward classes (OBC) and 1439 (87.2%) to general category. Majority (82.3%) were catering to a population of less than 1000. Mean (\pm SD) population catered was 947.05 (\pm 87.27).

1582 (95.9%) ASHAs were aware that adolescence age group is constituted by 10-19 years old. ASHA workers were asked about the common problems of adolescence age group. As shown in Fig. 1, 435 (26.4%) responded anemia, 368 (22.3%) knew vaginal discharge, 292 (17.7%) knew of menstrual problems, 172 (10.4%) told jaundice and 22 (1.4%) responded others like diarrhea, dental problems, etc. There was a significant difference in knowledge about common health

problems in adolescents in different age groups with anemia where 17.7% in age group <25 years, 25.8% in 25-45 years and 30.4% in >45 years were aware of anemia as a health problem among adolescents ($\chi^2=7.29$, $df=2$, $p=0.02$). 12 (11.2%) in <25 years, 190 (16.1%) in 25-45 years and 90 (24.6%) in >45 years knew about menstrual problems ($\chi^2=17.29$, $df=2$, $p=0.01$). There was no significant difference in knowledge about vaginal discharge with age group where 18 (16.8%) in <25 years, 257 (21.8%) in 25-45 years and 93 (25.4%) in >45 years ($\chi^2=4.14$, $df=2$, $p=0.12$) were aware of the same. For jaundice also, 10 (9.3%), 131 (11.1%) and 31 (8.4%) in respective age groups were aware of same ($\chi^2=2.20$, $df=2$, $p=0.33$) but the difference was not significant. There was no significant difference in education classes with knowledge about anemia ($\chi^2=0.14$, $df=2$, $p=0.93$), vaginal discharge ($\chi^2=0.73$, $df=2$, $p=0.69$) or with menstrual problems ($\chi^2=0.32$, $df=2$, $p=0.85$).

Table 1. Sociodemographic Profile of ASHA Workers

Characteristic		Frequency	Percent (N=1650)
Age (in years)	<25	107	6.5
	25-45	1178	71.4
	>45	365	22.1
Religion	Hindu	1610	97.6
	Muslim	40	2.4
Education	Till 10 th standard	963	58.4
	11 th -12 th standard	553	33.5
	Graduation and above	134	8.1
Marital status	Unmarried/ divorced/ separated	129	7.8
	Married	1521	92.2
Caste	Scheduled caste (SC)/ Scheduled tribe (ST)	103	6.2
	Other backward classes (OBCs)	108	6.5
	General	1439	87.2
Population served	<1000	1358	82.3
	1000-2000	261	15.8
	>2000	31	1.9

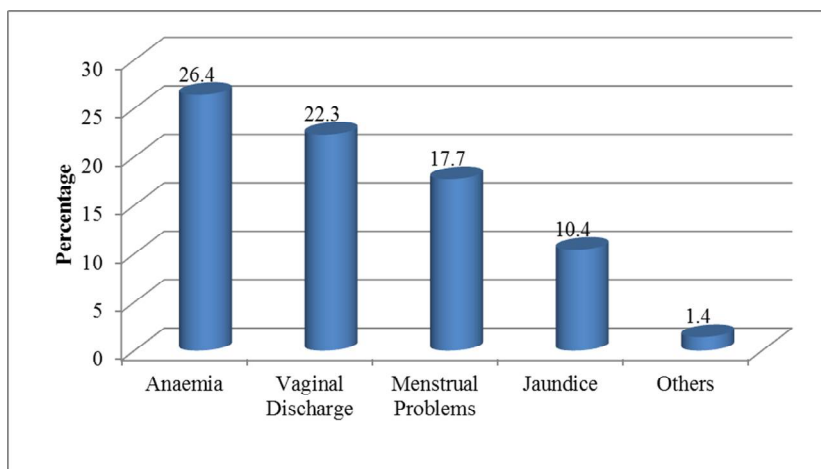


Figure 1. Knowledge of ASHA Workers about Common Problems of Adolescence Age Group

ASHAs were asked about their knowledge on prevention of reproductive tract infections amongst adolescents. In response to the question on what advice they would give to adolescent girls to prevent infection during menses, 431 (26.1%) told they would counsel for maintaining hygiene, 440 (26.7%) responded that they would advise the adolescents the use of clean pads and 181 (11.0%) told that they would counsel for change of pads frequently. There was significant difference in knowledge about use of clean pads with age groups ($\chi^2=8.21$, $df=2$, $p=0.01$) but not with maintaining hygiene

($\chi^2=5.18$, $df=2$, $p=0.07$) and change of pads frequently ($\chi^2=2.04$, $df=2$, $p=0.36$). There was no significant difference in knowledge about use of clean pads with education classes ($\chi^2=0.16$, $df=2$, $p=0.91$), with maintaining hygiene ($\chi^2=0.73$, $df=2$, $p=0.69$) and in change of pads frequently ($\chi^2=4.97$, $df=2$, $p=0.08$). Advice to be given to adolescent girls on management of menstrual problems was asked; 409 (24.8%) told cleanliness of private parts and 78 (4.7%) said wearing clean clothes and 70 (4.2%) said taking advice from health workers (Fig. 2).

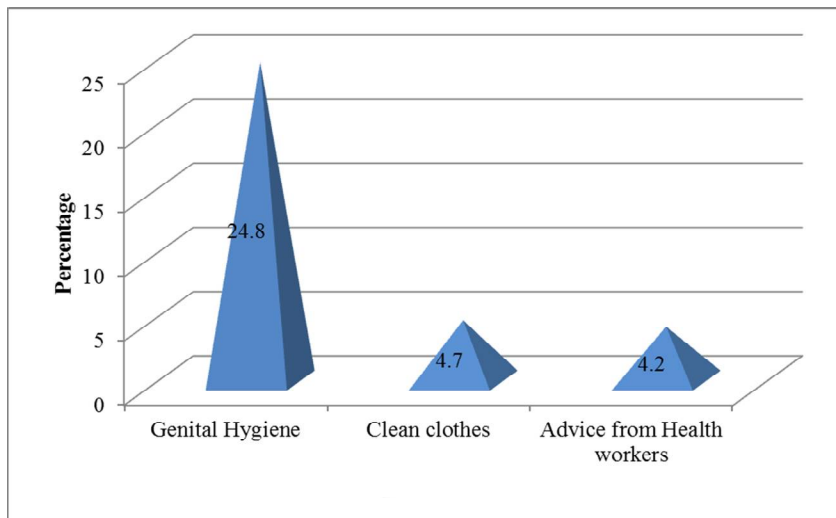


Figure 2. Knowledge of ASHA Workers about Prevention and Management of Menstrual Problems

Full form of Integrated Child Development Services (ICDS) scheme was known correctly to only 1 (0.06%) ASHA. Their knowledge about the schemes run by ICDS for adolescence was assessed; 216 (13.1%) knew of distribution of sanitary pads, 326 (19.8%) knew of teaching/ training in vocational skills, and 293 (17.8%) knew of imparting health education. 160 (9.7%) knew that *Kishori Shakti Yojana (KSY)* was implemented through ICDS. There was no association seen with education classes with knowledge about schemes run by ICDS for adolescence.

1469 (89.0%) knew correctly the cut-off for hemoglobin value for diagnosis of anemia in adolescence age group. Data was also collected about their knowledge of food items to be promoted for prevention of anemia in adolescence. 1611 (97.6%) knew of green leafy vegetables, 1345 (81.5%) responded milk and 329 (19.9%) said fruits. Only 2 (0.1%) ASHA workers knew that iron tablets are given weekly once under Weekly Iron Folic Acid Supplementation (WIFS) program.

Data was collected to assess their knowledge about contraceptive methods that can be used by adolescents. 1297 (78.6%) reported condoms, 58 (3.5%) tubectomy,

139 (8.4%) oral pills and 107 (6.5%) replied Copper-T. None of ASHAs knew about the legal age of marriage for girls in India.

Information was asked from ASHA workers about areas in which they feel their knowledge is insufficient when they interact with adolescents in the community. Table 2 shows the perception of ASHA workers regarding areas of lacunae for knowledge on adolescence health issues. Majority (23.7%) of ASHAs said that their knowledge about nutrition needs of adolescents and related counseling was insufficient. Next was anemia where 21% ASHAs were not fully knowledgeable about the causes, iron rich sources and preventive advice to adolescents.

Table 2. Lacunae in Knowledge of ASHA Workers about Adolescence Health Issues

Aspects	Number	Percentage (%)
Nutrition	391	23.7
Anemia	346	21
Physical changes	46	2.8
How to be healthy	153	9.3
Family environment	18	1.1

Discussion

The current study was conducted to assess the knowledge and practices for adolescent healthcare delivery among 1650 ASHA workers in Delhi. Although most of the ASHAs belong to age group of 25-45 years, 107 (6.5%) were below 25 years of age and 365 (22.1%) were more than 45 years. Some ASHAs were unmarried. These were contrary to guidelines of ASHA workers selection.¹¹ Similar findings of recruiting ASHA workers against selection criteria have been reported in some previous studies as well, where unmarried and other than recommended age-group ASHAs were reported to be selected.¹²⁻¹⁴ The guidelines should be followed strictly to maintain uniformity and transparency in recruitment and selection of ASHAs. It is likely that when an unmarried ASHA gets married, she may shift to some other place which is new to her. She may not be fully aware of the community and prevalent practices there. Her previous training may not be of use in such a situation, where she cannot work effectively as a community health worker.

The study showed that not all ASHAs were aware that adolescence age group ranges from 10 to 19 years. Their awareness about the common health problems in adolescence was also poor with only 26.4% knowing of anemia. It is important that ASHAs should be made aware of common health problems and their management so that they can advise accordingly to adolescents in their area. This will also play an important role in screening the adolescents for common health problems and help in early diagnosis and treatment. Studies have shown that this lack in knowledge significantly affects their practice in the community.¹⁵ This makes it important to focus on this important issue during training sessions. Similar findings were seen with their practices followed for promoting menstrual hygiene. Only one fourth of ASHA workers responded about counselling to adolescent girls.

Knowledge of ASHA workers was poor about the Integrated Child Development Services (ICDS) scheme and the various initiatives taken under ICDS to promote adolescent health. These findings were consistent with another study conducted by Paul et al. in which knowledge of ASHA workers was found low about the services provided under ICDS.¹⁶ This has serious implications on the fact that one of the roles of ASHA workers is to mobilize the community to access and utilize healthcare services. If ASHA workers are not aware of these schemes being run by platforms of ICDS, they will not be able to guide the target population to utilize the same. Positive finding was that almost ASHA

workers were aware of green leafy vegetables as a dietary source to prevent and treat anemia. Government of India has recently started Weekly Iron Folic Acid Supplementation (WIFS) program for prevention of anemia among adolescents. Under this scheme, iron tablets are given weekly to all adolescents. This was not known to ASHA workers, which could be a serious hurdle in success of this initiative since responsibility of covering out-of-school adolescents lies with Aanganwadi workers (ICDS workers) with the help of ASHA workers. This makes it important to update the knowledge of ASHA workers regarding newer schemes or programs launched and their role in them. Refresher trainings should be organized regularly to keep them up to date about the newer programs.

The knowledge of ASHA workers was good regarding the contraceptive methods that can be used by adolescents. Most of them knew of condoms. However, other responses like tubectomy and Copper-T were also reported. Data was collected to ask about the perceived lacunae in their knowledge about adolescent health issues in which nutrition was the first one. Training sessions of ASHAs should focus on the needs of ASHA workers and should address the lacunae that they have so that they are better oriented to the services they have to provide in the community.

Limitations

The knowledge about various components regarding adolescent health was not associated with education status which is contrary to expected. Possible explanation could be method of data collection where the questionnaires were distributed to all ASHA workers during training session. Possibility of copying responses and group responses cannot be ruled out. Thus the reliability of results cannot be ensured. It also signifies that such methods of data collection are not appropriate since information bias cannot be ruled out completely in analyzing valid responses.

Conclusion

The study found some gaps in the knowledge and practices about the adolescent health among ASHA workers.

Recommendations

Guidelines should be followed strictly in recruitment and selection of ASHA workers. Training should provide complete knowledge about the components of RMNCH A Plus program.

Conflict of Interest: None

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