



STUDY ON KNOWLEDGE ABOUT RASHTRIYA KISHOR SWASTHYA KARYAKRAM (RKSK) AMONG ADOLESCENTS ATTENDING HEALTH CENTRE IN DELHI.

Community Medicine

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ABSTRACT

Background: Adolescents are susceptible to several preventable and treatable health problems like nutritional disorders, substance abuse, mental health concerns, early and unintended pregnancy, unsafe sex, injuries and violence. To ensure holistic development of the adolescent population, the Ministry of Health and Family Welfare launched Rashtriya Kishor Swasthya Karyakram (RKSK) programme. This study aimed to assess the knowledge regarding Rashtriya Kishor Swasthya Karyakram (RKSK) among adolescents attending the health centre in Delhi. **Methods:** A cross-sectional study conducted among 100 adolescents belonging to age group of 10-19 years, who were attending the urban and rural health training centres in Delhi. Data was collected with the help of the predesigned and pretested questionnaire. Data was collected regarding socio-demographic details and knowledge regarding different adolescent health services provided under the programme. **Results:** Out of 100 adolescents, 18.0 % participants had adequate knowledge about RKSK. Knowledge about IFA supplementation, transmission and prevention of Sexually Transmitted Infection and common mental health problems was 52.0%, 36.0% and 24.0% respectively. Knowledge regarding adverse effects and consequences of tobacco, alcohol and drug abuse and risk factors for non-communicable diseases was 46.0% and 42.0% respectively. 12.0% participants had awareness about Adolescent Friendly Health Clinics and 8.0% had registered themselves at these clinics. 44.0% participants had knowledge about Adolescent Health Days. 71.4% of adolescent girls had awareness regarding good menstrual hygiene. **Conclusions:** The knowledge regarding RKSK programme is low amongst the adolescents. Awareness need to be spread regarding the various services provided under the programme through social media, local newspapers and television channels so that more number of adolescents avail these services.

KEYWORDS

Rashtriya Kishor Swasthya Karyakram, Knowledge, Adolescents, Awareness

INTRODUCTION

India has the largest adolescent population in the world, 253 million, and every fifth person is between 10 to 19 years. Adolescence is a phase of transition from childhood to adulthood. It is one of the most rapid phases of human development as several physical, social and emotional changes take place during this period.¹

The common health problems faced by adolescents are mainly mental health problems, early pregnancy and childbirth, Human Immuno deficiency Virus/Sexually Transmitted Infection (HIV/STI) and other infectious diseases, violence, unintentional injuries, malnutrition and substance abuse.

This age group comprises individuals in a phase of life requiring nutrition, education and counselling to ensure their development into healthy adults. It is the most important stage of the life cycle for health interventions and addressing adolescent health needs, can reduce several reproductive, maternal and child health challenges.²

Many healthcare programmes in our country address the problems of adolescents, namely Rashtriya Kishor Swasthya Karyakram, Adolescent Reproductive and Sexual Health Programme (ARSH), Kishori Shakti Yojana and Rajiv Gandhi Scheme for Empowerment of Adolescent Girls, (SABLA).³

Rashtriya Kishor Swasthya Karyakram (RKSK) aims to ensure that all adolescents in India realize their full potential by making informed and responsible decisions related to their health and well-being and by accessing the services and support they need to do so. The strategy focuses on age groups 10-14 years and 15-19 years with universal coverage.

It covers males and females in school and out of school, in urban and rural, married and unmarried, and vulnerable and under-served adolescents. It identifies six strategic priorities for adolescents which include Nutrition, Sexual and Reproductive Health (SRH), Non-Communicable Diseases (NCDs), Substance misuse, Injuries and Violence (including Gender-Based Violence) and Mental health.^{4,5}

It involves both community-based interventions which include Quarterly Adolescent Health Days (AHD), Weekly Iron and Folic Acid Supplementation (WIFS), Menstrual Hygiene Scheme (MHS), Peer

Education (PE) and facility-based interventions which include mainly the strengthening of Adolescent Friendly Health Clinics (AFHC).⁶

The strategy identifies seven critical components (7c), which need to be ensured in all program areas. These components are coverage, content, communities, counselling, communication, convergence and clinics. Health care services in Rashtriya Kishor Swasthya Karyakram include mainly treatment and management of severe malnutrition, RTI and STI problems, menstrual disorders, non-communicable diseases, violence-related injuries, sexual abuse among girls and substance abuse.⁷

Young people play a very crucial role in our state's health and future. Hence programmes about the health of young people will affect not only their lives but also the health of the country as a whole.

This study aims to assess the knowledge regarding Rashtriya Kishor Swasthya Karyakram (RKSK) among adolescents attending health centre in Delhi.

METHODS

A descriptive cross-sectional study was conducted on adolescents attending the OPD in Urban Health Training Centre, Gokalpuri and Rural Health Training Centre, Barwala. Both these centres are under the administrative control of Maulana Azad Medical College, New Delhi. Participants were recruited through systematic random sampling. In the OPD, every alternate adolescent was selected after taking written informed consent from parents/guardians and assent from them. Out of the 100 adolescents, 48 were from UHTC, Gokalpuri and 52 were from RHTC, Barwala. Data was collected through detailed interview with the help of predesigned and pretested questionnaire which included questions regarding socio-demographic details, knowledge regarding RKSK and its six objectives (Nutrition, Reproductive and Sexual health, mental health, substance misuse, non-communicable disease and injuries and violence), DISHA clinics (Adolescent Friendly Health Clinics), Adolescent health days, Menstrual hygiene scheme and various other services offered under this programme.

Inclusion Criteria

Adolescent of age group 10-19 years attending OPD of UHTC, Gokalpuri and RHTC, Barwala, Delhi voluntarily willing to

participate in the study were included in the study.

Exclusion Criteria

Adolescents who were severely ill or were having any psychiatric illness were excluded from the study.

Sample size

$$N = (1.96)^2 PQ/D^2$$

Where, P = Prevalence of awareness for Adolescent health services among adolescents taken as 39.2% Q=1-P D= Absolute error of 10%.

The calculated sample size comes out to be 92. Rounded off to include 100 adolescents.

Statistical Analysis

The data was cleaned and entered in MS Excel spread sheet and analysed using IBM SPSS Statistics Version 25. Data was expressed in percentage and proportions and were displayed in appropriate tables and figures.

Ethical Clearance

The study was initiated and conducted after obtaining Ethical approval from the Institutional Ethics Board of Maulana Azad Medical College. Confidentiality of the data collected was maintained and data was used only for the study purpose.

RESULTS

Out of total 100 participants included in the study, 44 (44.0%) participants were male and 56 (56.0%) were female. Age of participants in this study ranged from 10 to 19 years. Most of the participants 90 (90.0%) were Hindu by religion, while remaining 10 (10.0%) were Muslim. All of the participants (100.0%) were unmarried. Out of 100 adolescents, 48 (48.0%) were residents of urban area while remaining 52 (52.0%) were residents of rural area. Maximum number of participants 63 (63.0 %) belonged to Class II as per Modified B.G. Prasad scale for the year 2022. The distribution of participants according to their sociodemographic details is depicted in **Table 1**.

Table 1: Socio-demographic characteristics of study participants

Socio-Demographic Characteristics		Total N=100 'n' (%)
Age (in years)	10-14	36 (36.0)
	15-19	64 (64.0)
Gender	Male	44 (44.0)
	Female	56 (56.0)
Religion	Hindu	90 (90.0)
	Muslim	10 (10.0)
Marital Status	Unmarried	100 (100.0)
	Married	0 (0.0)
Residence	Urban	48 (48.0)
	Rural	52 (52.0)
School/College going	Yes	88 (88.0)
	No	12 (12.0)
Socioeconomic class	I	21 (21.0)
	II	63 (63.0)
	III	16 (16.0)

Out of 100 participants, 88 (88.0 %) participants went to either school/college while 12 (12.0 %) didn't went to school/college. (**Figure 1**)

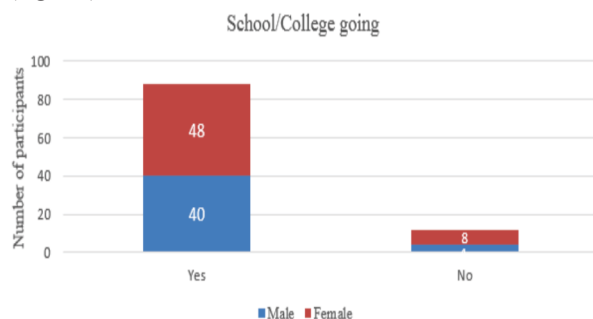


Figure 1: Distribution of study participants according to school/college going status

18.0 % participants had adequate knowledge about Rashtriya Kishor Swasthya Karyakram. Out of 44 male participants, only 9 (20.5 %) and of the total 56 female participants, 9 (16.1 %) had adequate knowledge about RKSK. (**Table 2**)

Table 2: Distribution of study participants according to Knowledge about Rashtriya Kishore Swasthya Karyakaram (RKSK) (N= 100)

Knowledge about RKSK	Male N=44	Female N=56	Total N=100
	'n' (%)	'n' (%)	'n' (%)
Adequate	9 (20.5)	9 (16.1)	18 (18.0)
Inadequate	35 (79.5)	47 (83.9)	82 (82.0)

Knowledge about IFA supplementation was present in 52 (52.0%) of participants. Twenty-seven (61.4 %) males and 25 (44.6%) females had knowledge about IFA supplementation. Nearly half (46.0%) of participants reported provision of IFA supplementation in school or Anganwadi centres.

Out of 100 participants, 43 (43.0%) reported provision of Albendazole tablets from school/AWCs. Only 22.0% were screened for anemia while 44.0% reported that they had received counselling for Nutrition and Health Education (NHE) from school/Anganwadi Centres. (**Table 3**)

Table 3: Distribution of study participants according to their knowledge regarding nutritional component of RKSK (n=100)

Factor	Male N=44 'n' (%)	Female N=56 'n' (%)	Total N=100 'n' (%)
Knowledge about IFA Supplementation			
Yes	27 (61.4)	25 (44.6)	52 (52.0)
No	17 (38.6)	31 (55.4)	48 (48.0)
Provision of IFA Supplementation			
Yes	26 (59.1)	20 (35.7)	46 (46.0)
No	18 (40.9)	36 (64.3)	54 (54.0)
Provision of Albendazole			
Yes	24 (54.5)	19 (33.9)	43 (43.0)
No	20 (45.5)	37 (66.1)	57 (57.0)
Screening for anemia at school/AWCs			
Yes	13 (29.5)	9 (16.1)	22 (22.0)
No	31 (70.5)	47 (83.9)	78 (78.0)
Counselling received for Nutrition and Health Education (NHE)			
Yes	26 (59.1)	18 (32.1)	44 (44.0)
No	18 (40.9)	38 (67.9)	56 (56.0)

Out of 100 participants, 36 (36.0 %) had received counselling about causation, transmission and prevention of STI and HIV at school/AWC/AFHC.

Out of these 36 participants ,17 (38.6 %) were males and 19 (33.9 %) were females. Only 30.0% participants had knowledge about risk of early marriage, conception and contraception. (**Table 4**)

Table 4: Distribution of study participants according to knowledge about sexual and reproductive health (N=100)

Factor	Male N=44 'n' (%)	Female N=56 'n' (%)	Total N=100 'n' (%)
Counselling received on STI and HIV at school/AWC/AFHC			
Yes	17 (38.6)	19 (33.9)	36 (36.0)
No	27 (61.4)	37 (66.1)	64 (64.0)
Knowledge about risk of early marriage, conception and contraception			
Yes	9 (20.5)	21 (37.5)	30 (30.0)
No	35 (79.5)	35 (62.5)	70 (70.0)

Out of 100 participants, 24.0 % had awareness of common mental health concerns. Out of these 15 (34.1 %) were males and 9 (16.1 %) were females. (**Figure 2**)

Awareness of common mental health concerns

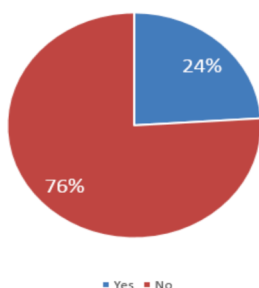


Figure 2: Distribution of study participants according to awareness of common mental health concerns (N=100)

Out of 100 participants, 25 (56.8 %) males and 21 (37.5 %) females had received counselling about the adverse effects and consequences of tobacco, alcohol and drug abuse during Adolescent Health Days. Twenty-four (54.5 %) males and 18 (32.1 %) females reported of receiving counselling on behavior risk modification (avoidance of junk foods with high carbohydrates, sedentary lifestyles, tobacco and alcohol at school/AWCs). (Table 5)

Table 5: Distribution of study participants according to knowledge about substance misuse (N=100)

Factor	Male N=44 'n' (%)	Female N=56 'n' (%)	Total N=100 'n' (%)
Counselling received on tobacco, alcohol and drug abuse			
Yes	25 (56.8)	21 (37.5)	46 (46.0)
No	19 (43.2)	35 (62.5)	54 (54.0)
Counselling received on behavior risk modification			
Yes	24 (54.5)	18 (32.1)	42 (42.0)
No	20 (45.5)	38 (67.9)	58 (58.0)

Adolescent Friendly Health Clinics are known as DISHA Clinics in Delhi. Very few 7 (15.9 %) males and 5 (8.9 %) females had awareness about Adolescent Friendly Health Clinics while only 5 (11.4 %) males and 3 (5.4 %) females had registered themselves at Adolescent Friendly Health Clinics. (Table 6)

Table 6: Distribution of study participants according to knowledge about Adolescent Friendly Health Clinics (N=100)

Factor	Male N=44 'n' (%)	Female N=56 'n' (%)	Total N=100 'n' (%)
Awareness regarding Adolescent Friendly Health Clinics			
Yes	7 (15.9)	5 (8.9)	12 (12.0)
No	37 (84.1)	51 (91.1)	88 (88.0)
Registration at Adolescent Friendly Health Clinics			
Yes	5 (11.4)	3 (5.4)	8 (8.0)
No	39 (88.6)	53 (94.6)	92 (92.0)

Out of 100 participants nearly half (44.0 %) had awareness about Adolescent Health Days. Out of these 26 (59.1 %) were males and 18 (32.1 %) were females. (Figure 3)

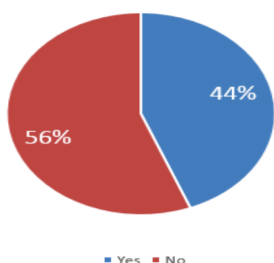


Figure 3: Distribution of study participants according to Awareness about Adolescent Health Days (N=100)

Out of 56 girls, only 22 (39.3 %) attended meeting called by ASHA for adolescent girls and 15 (26.8 %) used sanitary pads provided by ASHA/or at school. Majority 40 (71.4%) of adolescent girls had awareness regarding menstrual hygiene. (Table 7)

Table 7: Distribution of adolescent girls according to awareness regarding menstrual hygiene (N=56)

MENSTRUAL HYGIENE	Yes	No
Total N=56 'n' (%)		
Attending meeting called by ASHA for adolescent girls	22 (39.3)	34 (60.7)
Use of sanitary pads provided by ASHA/or at school	15 (26.8)	41 (73.2)
Awareness regarding menstrual hygiene	40 (71.4)	16 (28.6)

DISCUSSION

The purpose of this study was to assess the knowledge regarding Rastriya Kishore Swasthya Karyakaram among adolescents attending health centre in Delhi. In the current study, 18.0 % participants had adequate knowledge about Rastriya Kishore Swasthya Karyakaram. Knowledge regarding IFA supplementation was present in 52.0% of participants. Nearly half (46.0%) of participants reported provision of IFA supplementation from school or Anganwadi Centres of which 61.4 % were males and 44.6 % were females and 43.0% reported provision of albendazole tablets. Nearly 44.0 % reported that they had received counselling for Nutrition and Health Education (NHE) from school/AWCs. In a study conducted by "Understanding the lives of adolescents and young adults" (UDAYA), a programme of research conducted by the Population Council, in Uttar Pradesh, reported that awareness of the weekly Iron and folic acid supplementation was present in 33.0% of young girls and 26.0% of young boys and about 7.0% of younger adolescents and 5.0% of older adolescents had received Iron and folic acid and deworming tablets from the Weekly Iron and Folic Acid Supplementation programme.⁸ In India, much less adolescents have knowledge about RKSK programme and are thus unable to utilise the services provided under this programme. Therefore, there is a need for government of India to create more Information Education and Communication and Behaviour Change Communication activities to spread the awareness in the general public.

In the current study, 30.0% of participants knew the risk of early marriage and conception and had knowledge of contraception. Similar findings were seen in study conducted by Dixit G et al⁹ in Urban Health Centres of Ahmedabad in Gujrat in 2017 in which knowledge regarding various contraceptive methods was present in 48.0% of adolescents. In the present study, it was seen that 36.0% participants had received counselling on STI and HIV at school/AWC/AFHC. In a study conducted by Kumar T et al¹⁰ in 2017 in Dehradun District of Uttarakhand, awareness about HIV/AIDS amongst adolescents was found to be 64.0% in rural and 84.0% in urban areas. Overall, 54.0% of adolescents in rural and 79.0% in urban areas had heard of methods of prevention of pregnancy.

In our study, 46.0% participants had received counselling on tobacco, alcohol and drug abuse. According to the Global Youth Tobacco Survey (GYTS 2019), the prevalence of tobacco use among students was found to be 8.5%, out of which 9.6% were boys and 7.4% were girls. Knowledge and attitude was present in 71.0% of students who thought other people's cigarette smoking is harmful to them. 18.0% students favoured ban on smoking inside enclosed public spaces.¹¹

In the present study, it was found that 12.0% participants had awareness about Adolescent Friendly Health Clinics of which 15.9% were males and 8.9% were females. 8.0% had registered themselves at these clinics. Similar findings were seen in study conducted by Singhe MS et al¹² in Karnataka in 2014 in which 15.5% adolescents had knowledge about AFHC clinic. The study conducted by Santhya K.G et al¹ in 2014 also reveals the similar result where awareness of AFHCs was low as only 4.5% of young men and 7.8% of young women were aware of AFHCs.

In the present study, 71.4% of adolescent girls had awareness regarding maintain good menstrual hygiene. It was seen that 39.3 % of girls attended meetings called by ASHA for adolescent girls and 26.8 % used sanitary pads provided by ASHA at school. Similar findings were reported from study conducted by Desai S et al¹³ in 2017 in Uttar Pradesh in which 70.0 % girls were aware of menstrual hygiene. In a

study conducted by Mahajan A et al¹⁴ in 2017 in Himachal Pradesh only 29% girls had adequate knowledge regarding menstrual hygiene. One of the major limitations of the study is that it cannot be generalized as it is carried out in health facility and not in the community.

CONCLUSION

Knowledge regarding RKSK is low amongst the adolescents living in Delhi. More awareness need to be created regarding the various services provided under the programme so that we can increase the coverage of the programme and reduce the prevalence of malnutrition, injuries and violence and substance misuse and at the same time improve the reproductive health and enhance mental health of adolescents.

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Declarations

Funding: MAMTA Health Institute for Mother and Child, New Delhi

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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