



# A Study on Awareness and Utilization of Kishori Shakti Yojana (KSY) Services among Adolescent Girls in Urban Area of Davanagere Taluk

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## ABSTRACT

**Background:** Adolescence is an intermediate phase of development between childhood and adulthood. In 2000, Kishori Shakti Yojana (KSY) was initiated with aim of improving nutrition, health status and empowerment of adolescent girls.

**Objective:** To assess the awareness and utilization of KSY services among adolescent girls and the factors influencing them.

**Methodology:** A community based cross-sectional study was conducted among adolescent girls of urban Davanagere. A house to house survey was conducted among 376 girls; the data was collected by interview method, analyzed using SPSS (v16).

**Results:** The mean age of adolescent girls was 14.21 years; only 123 (32.7%) knew about KSY services. Supplementary nutrition services were utilized by only 100 (26.5%) adolescent girls, 96 (25.5%) attended health education sessions, 44 (11.7%) received iron and folic acid tablets but none of them utilized vocational training services. Reasons for poor utilization were lack of awareness, lack of motivation to avail services and unsuitable timings.

**Conclusion:** This study observed poor awareness and utilization of KSY services. The need of hour is to spread more awareness and increase participation of adolescent girls addressing at individual, family and community levels.

**Key Words:** Kishori Shakti Yojana, Adolescent girls, ICDS, Anganwadi

## INTRODUCTION

Adolescence is an intermediate phase of growth and development between childhood and adulthood. The World Health Organization (WHO) defines an adolescent as any person between ages 10 and 19.<sup>1</sup> Globally, adolescents account for around 1.2 billion people, or 1 in 6 of the world's population.<sup>2</sup> Adolescents are considered to be healthy group nevertheless, many adolescents do die prematurely due to various reasons that are either preventable or treatable.<sup>1</sup>

Females are often referred as weaker sex and often are subjected to egregious discrimination, be it an

opportunity to learn and read or access to nutrition and the chance to grow healthy and strong. This behavior of the society poses a serious threat to the adolescent girl's health.<sup>3,4</sup>

Protecting and promoting the health of the adolescent girls is extremely important to reduce the health risks and prevent health problems in adulthood and thus improving the countries' future health and ability to develop and thrive.<sup>2,5,6</sup>

Hence, the Government of India has taken many initiatives to improve the adolescent health in our country, one of such scheme is Kishori Shakti Yojana (KSY) designed exclusively for adolescent

girls, which was launched with the wide objectives to improve the nutritional, health and development status, promote awareness of health, hygiene, nutrition and family care, help them to seek opportunities for learning life skills, going back to school, help them gain a better understanding of their social environment and take independent decisions to become high yielding members of the society.<sup>7</sup>

Though there are various efforts made by the Government of India, there is a poor utilization of these services by adolescent girls in different areas, Hence this study was designed to assess the awareness and utilization of KSY by the adolescent girls and the various factors influencing them.

## METHODS

A Community based cross-sectional study was conducted among adolescent girls aged between 11 to 18 years, who were residing in Azad nagar and Bashanagar area of urban Davanagere taluk. The study was carried out during the months of July to December 2016.

The sample size was calculated using the formula  $n=4pq/d^2$  where n= Sample size; p= (51%) awareness from the previous study<sup>8</sup>; q=100-p; and d=admissible error (10% of p). So the calculated sample size n= 384. House to house survey was carried out in the study areas and girls between the age 11-18 years who are willing to participate in the study were included. Of the study participants, 8 of them provided incomplete data, so these participants were excluded from the study; thus the final study participants were 376.

Data were collected by interview method using a pre-designed semi-structured questionnaire. The nature of information which has to be furnished by the study participants was explained by the investigators. The questionnaire consisted of questions regarding awareness and utilization of Anganwadi centre and its services including Kishori Shakti Yojana (KSY) -awareness and utilization of supplementary nutrition, iron and folic acid tablets, vocational training, health education sessions and reasons for poor compliance towards KSY. The socio economic status of the study participants was

assessed by modified BG Prasad classification.<sup>9</sup>

Ethical approval for the study was obtained from the institutional ethics committee. Written informed consent was taken from all participants. Anonymity of study participants was maintained to enhance participation rate and to ensure participants confidentiality. At the end of the study, a health education program was organized for all the study participants to spread awareness about importance of adolescent health and the programs/scheme available for adolescent girls.

Data were compiled in a Microsoft Excel worksheet, and Statistical Package for Social Sciences (SPSS) version 16.0 was used to analyze the data. Descriptive statistics were reported as mean (standard deviation) for continuous variables and frequencies (percentage) for categorical variables. Relevant statistical tests were applied to study the association between different variables. Chi square/ Fischer Exact tests were used as required. P value <0.05 is considered as statistically significant.

## RESULTS

A total of 376 adolescent girls participated in this study. The age of the participants ranged from 11 to 18 years, with a mean age of  $14.60 \pm 2.14$  years. Among them, 215 (57.2%) girls belonged to early adolescent age group i.e., (11-14 years) and 161 (42.8%) girls belonged to late adolescent age group (15-18years). Majority of the adolescent girls 360 (95.7%) were Muslim by religion and 369 (98.1%) of them belonged to nuclear family. Nearly half of the study participants, 176 (45.7%) belonged to SES class 5 according to modified BG Prasad classification. Respondents who stated that their parent (Mother/ Father) could not read and write in any language were 124 (33%). Among the adolescent girls interviewed only 222 (59.04%) of the girls were school going, the rest were school dropouts due to various reasons like family decision, financial constraints, poor interest in studies.

Table 1 show that all the adolescent girls were aware of the nearest Anganwadi centre and its location.

**Table 1: Awareness about Anganwadi centre and its services among adolescent girls (N=376)**

Awareness about Anganwadi and its Services	Adolescent girls (%)
Heard about Anganwadi centre and knows the location of the nearest Anganwadi centre	376 (100)
Visited the Anganwadi at least once	354 (94.1)
Aware about supplementary nutrition ,being given to pregnant women	346 (92)
Aware about supplementary nutrition for Anganwadi children	357 (94.9)
Aware about non formal/preschool education for children of 3-6 years	356 (94.7)
Aware about health education services	125 (33.2)
Aware about immunization services	204 (54.3)

**Table 2: Awareness and Utilization of KSY services by adolescent girls**

KSY services for adolescent girls	Services (N=376) (%)	
	Awareness	Utilization
Supplementary nutrition	123 (32.7)	100 (26.5)
Health education programme	125 (33.24)	96 (25.5)
Iron and folic acid	100 (26.5)	44 (11.7)
Vocational training	56 (14.89)	0 (0)

**Table 3: Satisfaction of quantity and quality of supplementary nutrition**

Satisfaction of supplementary nutrition	Quantity (n=100) (%)	Quality (n=100) (%)
Satisfied	58 (58)	73 (73)
Somewhat satisfied	28 (28)	21 (21)
Unsatisfied	14 (14)	6 (6)

**Table 4: Reasons for poor utilization of KSY services**

Reasons for poor utilization of KSY services	Adolescent Girls (N=376) (%)
Lack of awareness about services	208 (55.3)
Lack of motivation in availing services	82 (21.8)
Unsuitable timings	49 (13)
Services not meant for us	34 (9)
Restrictions by family	3 (0.9)

Majority of the girls were aware about the services provided to pregnant women 346 (92%) and children 357 (94.9%); however there was poor awareness about the health education services provided by Anganwadi centers (33.2%). Less than half of the adolescent girls (32.7%) were aware of the scheme Kishori Shakti Yojana at Anganwadi.

Table 2 showing the awareness and utilization of KSY services, we observed that both the awareness and utilization of these services is very poor in the study area, the least being for vocational services.

**Supplementary Nutrition**

Among the total study participants, 123 (32.7%) were aware of this service and only 100 (26.5%) girls were a part of supplementary nutrition. Among them, 22 (22%) of them received nutrition for 6 months and only 13 (13%) of them noted weight gain in that period. **Table 3** showing the satisfaction percentage of quantity and quality of supplementary nutrition that shows majority of the adolescent girls are satisfied with the quantity 58 (58%) and quality 73 (73%) of the supplementary food provided under KSY services.

**Iron and folic Acid (IFA) tablets**

Overall, 290 (77.1%) adolescent girls received iron and folic acid tablets out of which 246 (84.8%) received from school and only 44 (15.2%) received it from Anganwadi centre. Among the girls who received IFA tablets from Anganwadi centre only 19

(43.2%) adolescent girls took the tablet regularly. Most of them, 31 (70.5%) took the IFA tablets for less than 6 months. The reasons for the poor compliance towards IFA tablets included not useful 116 (40%), side effects 58 (20%), belief that it may cause harm 47 (16.2%), lack of supply 46 (15.8%), feel healthy and tablets unnecessary 23 (7.9%).

**Health education programs and Vocational training**

Only 96 (25.5%) girls participated in the health education programs. The topics of these sessions included nutrition, hygiene, childcare, family welfare, menstrual hygiene and women empowerment. Though 56 (14.89%) of the adolescent girls were aware of the vocational training services available none of the study participant underwent any training.

The least compliance was observed for vocational training as majority of the study participants were unaware of such services in Anganwadi centers under KSY. Even among those who are aware could not utilize these services because of lack of family support.

We tried to explore the reasons for poor utilization of KSY services and the most common reason observed was lack of awareness 208 (55.3%) followed by lack of motivation in availing services 82 (21.8%).

Statistically significant association was found between utilization of KSY services and age of the adolescent girls with health education services (p=0.015), IFA tablets (p=0.0001). We also observed a gap in the awareness and utilization of KSY services among the adolescent girls, which was found to be statistically significant with p value < 0.0001.

**DISCUSSION**

Kishori Shakti Yojana (KSY) is one of the various schemes that work in the direction of adolescent girl’s empowerment, this scheme that runs under, Ministry of women and child welfare, Government of India; it seeks to empower adolescent girls so that they can take charge of their own lives. Through its interventions KSY aims at bringing about a difference in the lives of the adolescent girls by providing them with an opportunity to realize their full potential. The current coverage of KSY is 6118 blocks all over the country, working with existing ICDS facilities.<sup>7</sup>

This study was designed with an objective to assess the awareness and utilization of the Kishori Shakti Yojana services by the adolescent girls and the various factors influencing them. In this study among 376 adolescent girls, 215 (57.2%) girls be-

longed to early adolescent age and 161 (42.8%) girls belonged to late adolescent age. A similar study conducted by Kowli S et al.<sup>8</sup> reported the mean age of the girls was 14.21 years and majority (55.8%) of the girls belonged to the age group of 11-14 years. In our study majority of the adolescent girls, 360 (95.7%) were Muslims by religion however Kowli S et al<sup>8</sup> reported predominantly Hindu 74.4% participants.

Of the adolescent girls interviewed only 222 (59.04%) of the girls were school going the rest were school dropouts due to various reasons including family decision, financial constraints, poor interest in studies. A similar study conducted in Uttar Pradesh and Rajasthan reported 49.2% girls had dropped out from school.<sup>10</sup>In this study, all the adolescent girls 376 (100%) were aware of the nearest Anganwadi Centre and its location, Majority of the girls were aware about the services provided to pregnant women 346 (92%) and children 356 (94%); Less than half of the adolescent girls 123 (32.7%) were aware of Kishori Shakti Yojana at Anganwadi centre. A similar study conducted by Vishal R et al.<sup>11</sup> reported all adolescent girls were aware about Anganwadi centre and services provided through these centres for children, women and adolescent girls. They knew about Kishori Shakti Yojana (KSY) running under Integrated Child Development Scheme (ICDS) and they specifically mentioned that KSY was operational through Anganwadi centers. In a similar study done in Uttar Pradesh and Rajasthan awareness found to be better 45.7%.<sup>10</sup>

### Utilization of KSY services

One of the objectives of Kishori Shakti Yojana is to improve the nutritional and health status of girls in the age group of 11-18 years as various baseline survey showed that health and nutrition of adolescent girls are at suboptimal level.<sup>12</sup>In this study, 100 (26.5%) of the girls were part of supplementary nutrition program under KSY. Among them, 22% of them received nutrition for 6 months and only 13% of them noted weight gain in that period. Majority of them were satisfied with the quantity and quality of the foods provided. Similar findings were seen in studies where utilization of Rajiv Gandhi Scheme for Empowerment of Adolescent Girls (RGSEAG) also known as SABLA was 86.9%<sup>13</sup>another study in which 62%<sup>14</sup> adolescent girls were receiving adequate quantity and quality of supplementary nutrition. Contrast findings were seen in a study showed that only 7% of the adolescent girls were availing supplementary food services provided by Anganwadi.<sup>8</sup>

Adolescent girls are extremely prone to iron deficiency with highest prevalence is between the ages of 12-15 years when requirements are at a peak. In

all Member States of the South-East Asia Region, except Thailand, more than 25% of adolescent girls are reported to be anaemic.<sup>15</sup> Iron and folic acid supplementation is being implemented in KSY services.<sup>12</sup>In this study, only 44 (11.7%) of the total adolescent girls received IFA tablets, among them only 43.2% adolescent girls took the tablet regularly. The reasons for the poor compliance towards IFA tablets included belief that it is not useful, side effects, belief that it may cause harm, lack of supply and feel healthy, tablets unnecessary. A study conducted in Belgaum, Karnataka among adolescent girls reported 76.6% of the girls received IFA tablets from Anganwadi centre.<sup>16</sup>Though there are various options for adolescent girls to collect IFA tablets like Anganwadi centre's, schools, adolescent health clinic in primary health centre's, right motivation and guidance must be given to the adolescent girls and the elders in the families must be educated about the benefit of these tablets. Contrast findings were seen in study done by Sandeep kumar et al where none of the adolescent girls received IFA tablets.<sup>17</sup>

In this study, only 96 (25.5%) girls participated in the health education programs, topics of these sessions included nutrition, hygiene, childcare, family welfare, menstrual hygiene and women empowerment. The participation of girls in health education varied for different studies Sharma M et al.,<sup>16</sup> reported 73% and Vishal R et al.,<sup>11</sup> reported 100%.

In this study, Majority of the participants were not aware of the vocational training services available, some of them 56 (14.89%) who were interested did not know whom to approach. A similar study reported that only 5 of the study participants underwent vocational training under KSY among them only 3 participants were satisfied with the training.<sup>8</sup>Another study done in Bikaner also reported that only 10.8% adolescents underwent training.<sup>18</sup>

The limitations of this study are that utilization of KSY services was elicited by self-reporting. A qualitative approach could have added new dimensions on reasons for poor utilization of services.

### CONCLUSION

This study revealed poor awareness and utilization of KSY services among the adolescent girls and the most common reason for poor utilization of these services being poor awareness followed by lack of motivation.

### RECOMMENDATIONS

The need of the hour is spreading awareness about the services under ICDS and its benefits for adoles-



cent girls through various Information Education and Communication (IEC) activities followed by collaboration with the schools for better involvement of the school going adolescent girls in these services. Roping in the parents and community leaders in IEC activities as the decision for the adolescent girls is taken by the elders/ head of the family.

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