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Factors influencing the knowledge of rural adolescent girls and young women of northern Karnataka about reproductive health

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ABSTRACT

The study was conducted during 2015-2016 to assess the knowledge level on reproductive health among rural adolescent girls and young women of northern Karnataka and also to know the factors influencing the knowledge. On the whole 560 respondents were selected. The mean age of the respondents was 15.9 years and their mean age at menarche was 13.33 years. A self-structured questionnaire was used to collect information regarding reproductive health. Totally 9.10 per cent of the families belonged to upper middle, 78.21 per cent to lower middle and 12.68 per cent to poor middle class on socio-economic scale (SES). Majority of them (75.18%) were having moderate followed by low or high knowledge on reproductive health. The results revealed that there was a positive and significant association between SES and age of the respondents and reproductive health knowledge. It indicated that higher is the SES and age of the respondents better is their knowledge on reproductive health.

Keywords: Reproductive health; knowledge; adolescent girls; young women

INTRODUCTION

Health is an important factor in life. World Health Organization (WHO) defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Reproductive health addresses the reproductive processes, functions and systems at all stages of life. Reproductive health therefore implies that people are able to have a responsible, satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so.

Rates of poor reproductive health (RH) and family planning outcomes among young women are higher. RH is a critical component of women's health and overall well-being around the world especially in developing countries. The RH has been of great concern for every woman.

One in every five people in the world is an adolescent between 10 and 19 years of age (Tegegn et al 2008). With an estimated 1.2 billion adolescents alive today, the world has the largest adolescent population in history. Of these about 85 per cent live in developing countries. Moreover more than half of the world's population is below the age of 25 and four out of five young people live in developing countries. Many adolescents die prematurely every year; an estimated 1.7 million young men and women between the age of 10 and 19 lose their lives in accidents, violence and pregnancy-related complications and other illnesses that are either preventable or treatable. As a result adolescent reproductive health (RH) is an increasingly important component of global health (Tegegn et al 2008).

Adolescence generally is a healthy period of life; many adolescents are less informed, less experienced and less comfortable accessing health services for RH than adults. Adolescents often lack basic RH information, knowledge and access to affordable confidential health services for RH. Many do not feel comfortable in discussing RH with parents.

Likewise parents, healthcare workers and educators are frequently unwilling or unable to provide complete, accurate and age-appropriate RH information

to young people. This is often due to their own discomfort about the subject or the false belief that providing the information will encourage sexual activity. Adolescents may also experience resistance or even hostility and bad attitudes from adults when young people attempt to obtain the RH information and services they need. They therefore may be at increased risk of sexually transmitted infections (STIs), HIV, unintended pregnancy and other health consequences. For women aged 15 to 19 years complications of pregnancy, childbirth, and unsafe abortion are the major causes of death. Young people aged 15 to 24 years have the highest rates of STIs including HIV/AIDS. These circumstances can be attributed to a number of social, cultural, economic and gender-related factors many of which are avoidable problems.

The present study was undertaken to know the knowledge level on reproductive health and the relationship between age and socio-economic status with knowledge on reproductive health among rural adolescent girls and young women.

METHODOLOGY

Correlation design was used to know the relationship of knowledge on reproductive health by age and socio-economic status of rural adolescent girls and young women. The sample comprised seven districts of northern Karnataka. In each district two Talukas were selected randomly and in each Taluka two villages were taken for the study. Thus the sample was drawn from 28 villages. The unmarried girls who attained menarche were randomly selected to assess their knowledge on reproductive health. Random (snow-ball) sampling technique was used to select the 20 adolescent girl and yound woman respondents in the age of 13-18 years from each village with the final total of 560 respondents. The mean age of selected respondents was 15.9 years and mean age at menarche was 13.33 years.In this study dependent variable was knowledge on reproductive health and independent variables were age of the respondents, size of the family and socio-economic status.

A self-structured interview schedule having questionnaire regarding reproductive health and socio-economic status scale development by Aggarwal et al (2005) was used for the study. The reliability of the scale was established by Cronbach's alpha method. The alpha value was 0.78 which was significant at 0.01 level. The preference rating was given as scoring and total scores were divided into 3 categories on knowledge level viz low (1-7), medium (18-35) and high (36-53). Socio-economic status of the family was classified into six categories viz upper high= >76, high= 61-75, upper middle= 46-60, lower middle= 31-45, poor middle= 16-30, very poor= <15.

RESULTS and DISCUSSION

District-wise distribution of SES of the respondents is presented in Table 1. The data depict that majority of the respondents (78.21%) belonged to lower middle class of SES in all the districts under study. Vijaypur had the maximum number of respondents (86.25%) belonging to this class followed by Gadag (81.25%). Maximum number of respondents belonged

Table 1. District-wise socio-economic status of the respondents

District	Respondents (number)	Socio-economic status (SES)					
		Upper high	High	Upper middle	Lower middle	Poor middle	Very poor
Dharwad	85	0	0	9 (10.58)	60 (70.58)	16 (18.82)	0
Belgaum	80	0	0	12 (15.00)	64 (80.00)	8 (10.00)	0
Haveri	80	0	0	6 (7.50)	63 (78.75)	11 (13.75)	0
Bagalkot	80	0	0	10 (12.50)	61 (76.25)	9 (11.25)	0
Uttar Kannada	75	0	0	8 (10.66)	60 (80.00)	7 (9.33)	0
Vijayapur	80	0	0	4 (5.00)	69 (86.25)	7 (8.75)	0
Gadag	80	0	0	2 (2.50)	65 (81.25)	11 (13.75)	0
Total	560	0	0	51 (9.10)	438 (78.21)	71 (12.68)	0

Figures in the parentheses indicate percentages
Socio-economic status scale: Upper high= >76, High= 61-75, Upper middle= 46-60, Lower middle= 31-45, Poor middle= 16-30, Very poor= <15

to poor middle class (18.82%) in Dharwad district whereas in case of upper middle class maximum number was in Belgaum district (15.00%).

Demographic characteristics of the respondents (Table 2) show that mainly the fathers of the respondents were working as daily wage workers (44.28%) followed by 42.32 per cent who had agriculture as their profession. Majority in Dharwad (48.24%), Belgaum (43.75%) and Haveri (43.75%) worked as daily wagers. In Uttar Kannada, Bagalkot, Gadag and Vijaypur districts mainly the fathers' occupation was agriculture (72.00, 71.25, 52.50 and 46.25% respectively). In case of education the fathers of the respondents mainly had education up to primary level (31.43%) followed by 26.96 per cent who were illiterate. In Vijaypur and Bagalkot majority (46.25 and 30.00%) were illiterate whereas in Uttar Kannada, Dharwad, Gadag, Haveri and Belgaum they had education up to primary level (45.33, 35.29, 30.00, 28.75 and 22.50% respectively). Majority had family size of 3-7 (73.75%) and out of the total districts Haveri topped the list with 85.00 per cent followed by Uttar Kannadda with 84.00 per cent.

The data given in Table 3 show that majority of the respondents (75.18%) had medium level of knowledge on reproductive health. This was true for all the districts. District-wise maximum medium level knowledge was 80.00 per cent each in Uttar Kannada and Belgaum districts followed by Gadag (76.25%) .

The relationship and association between the knowledge on reproductive health and SES are depicted in Table 4. Maximum respondents (87.32%) had middle level of socio-economic status whereas only 12.68 per cent had poor status in the districts under study. Maximum medium level knowledge (66.43%) respondents belonged to middle class.

The rural adolescent girls and young women in the age group of 13-14 years mainly had low knowledge of reproductive health as 52.17 per cent of them fell in this group (Table 5). But the age groups of 15-16 and 17-18 years were having high knowledge (39.35 and 46.71% respectively). This relationship depicts that the knowledge of rural adolescent girls and young women about reproductive health increased with age.

Earlier Joseph et al (1997) highlighted the extremely poor knowledge of the girls about nutrition, menstruation, pregnancy and childcare. Kulkarni and Durge (2014) revealed that 65.8 per cent of the girls had one or more reproductive morbidity and a high prevalence of dysmenorrhoea (53.6%). There was a significant association between age of the girls and dysmenorrhoea as well as between education of the girls and reproductive morbidity. Mondal et al (2015) worked on the factors that determine knowledge of reproductive healthcare among female university students in Bangladesh and reported that more than one-third (34.3%) respondents did not have sufficient knowledge of it. The chi-square test identified the significant ($p < 0.05$) associations between respondents' knowledge of reproductive healthcare with their age, education, family type, watching television, knowledge about pregnancy, family planning and contraceptive use.

CONCLUSION

This study investigated the interrelationships between socio-demographic characteristics and knowledge on reproductive health of adolescent girls and young women in northern Karnataka. Majority of the respondents (75.18%) had medium level of knowledge on reproductive health. The rural adolescent girls and young women in the age group of 13-14 years mainly had low knowledge of reproductive health as 52.17 per cent of them fell in this group. This relationship depicts that the knowledge of rural adolescent girls and young women about reproductive health increased with age.

Under such circumstances government needs to include the reproductive health education within the formal education as a compulsory course and also start various programmes about reproductive healthcare to emphasize its importance and address the gap so that they may be fully aware about their reproductive healthcare.

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Table 2. Demographic characteristics of respondents

Parameter	Number of respondents in the district							Total (n= 560)
	Dharwad (n= 85)	Belgaum (n= 80)	Vijayapur (n= 80)	Bagalkot (n= 80)	Uttar Kannada (n= 75)	Gadag (n= 80)	Haveri (n= 80)	
Father's occupation								
Daily wage worker	41 (48.24)	35 (43.75)	19 (23.75)	8 (10.00)	15 (20.00)	15 (18.75)	35 (43.75)	248 (44.28)
Self-employment	15 (17.65)	16 (20.00)	16 (20.00)	2 (2.50)	6 (8.00)	5 (6.25)	2 (2.50)	62 (11.07)
Agriculture	20 (23.53)	16 (20.00)	37 (46.25)	57 (71.25)	54 (72.00)	42 (52.50)	11 (13.75)	237 (42.32)
Private job	2 (2.40)	6 (7.50)	4 (5.00)	3 (3.75)	1 (1.33)	0	4 (5.00)	20 (3.57)
Government job	7 (8.24)	7 (8.75)	4 (5.00)	8 (10.00)	2 (2.66)	3 (3.75)	8 (10.00)	39 (6.96)
Father's education								
Illiterate	28 (32.94)	20 (25.00)	37 (46.25)	24 (30.00)	13 (17.33)	20 (25.00)	9 (11.25)	151 (26.96)
Primary school	30 (35.29)	18 (22.50)	26 (32.50)	21 (26.25)	34 (45.33)	24 (30.00)	23 (28.75)	176 (31.43)
High school	23 (27.06)	14 (17.50)	2 (2.50)	3 (3.75)	4 (5.33)	2 (2.50)	19 (23.75)	67 (11.96)
>High school to SSLC	8 (9.41)	12 (15.00)	3 (3.75)	17 (21.25)	12 (16.00)	4 (5.00)	7 (8.75)	63 (11.25)
PUC	11 (12.94)	9 (11.25)	8 (10.00)	16 (20.00)	5 (6.66)	13 (16.25)	18 (22.50)	80 (14.29)
Degree and PG	4 (4.71)	5 (6.25)	3 (3.75)	4 (5.00)	3 (4.00)	2 (2.50)	2 (2.50)	23 (4.11)
Family size (number of members)								
3-7	62 (72.94)	60 (75.00)	29 (36.25)	66 (82.50)	63 (84.00)	65 (81.25)	68 (85.00)	413 (73.75)
8-12	15 (17.65)	13 (16.25)	32 (40.00)	4 (5.00)	6 (8.00)	13 (16.25)	9 (11.25)	92 (16.43)
13-16	8 (9.41)	7 (8.75)	19 (23.75)	10 (12.50)	6 (8.00)	2 (2.50)	3 (3.75)	55 (9.82)

Figures in the parentheses indicate percentages

Table 3. Distribution of respondents according to knowledge on reproductive health (n= 560)

Knowledge level	Number of respondents in the district							Total
	Dharwad (n= 85)	Vijayapur (n= 80)	Bagalkot (n= 80)	Uttar Kannada (n= 75)	Belgaum (n= 80)	Haveri (n= 80)	Gadag (n= 80)	
Low	8 (9.41)	11 (13.75)	12 (15.00)	9 (12.00)	10 (12.50)	11 (13.75)	9 (11.25)	70 (12.50)
Medium	60 (70.59)	43 (53.75)	56 (70.00)	60 (80.00)	64 (80.00)	57 (71.25)	61 (76.25)	421 (75.18)
High	12 (14.12)	8 (10.00)	6 (7.50)	11 (14.67)	14 (17.50)	10 (12.50)	7 (8.75)	69 (12.32)

Figures in the parentheses indicate percentages
Knowledge level score: Low= 1-7, Medium= 18-35, High= 36-53

Table 4. Relationship and association of knowledge of reproductive health and socio-economic status of rural adolescent girls and young women

Socio-economic status	Knowledge on reproductive health				r-value	Chi-square value
	Low	Medium	High	Total		
Middle	53 (9.46)	372 (66.43)	64 (11.43)	489 (87.32)	0.77**	8.05*
Poor	17 (3.04)	49 (8.75)	5 (0.89)	71 (12.68)		
Total	70 (12.50)	421 (75.18)	69 (12.32)	560 (100.00)		

Figures in the parentheses are percentages, **Significant at 0.01 level, *Significant at 0.05 level

Table 5. Relationship of knowledge on reproductive health and age of rural adolescent girls and young women

Age (years)	Knowledge on reproductive health				r-value	Chi-square value
	Low	Medium	High	Total		
13-14	132 (52.17)	99 (39.13)	22 (8.69)	253 (45.18)	0.81**	9.53*
15-16	53 (34.19)	41 (26.45)	61 (39.35)	155 (27.68)		
17-18	28 (18.42)	53 (34.87)	71 (46.71)	152 (27.14)		

Figures in the parentheses are percentages, **Significant at 0.01 level, *Significant at 0.05 level

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