Knowledge and Attitudes about Family Planning among Girls in Rajasthan: Results from PMA2020 Rajasthan survey

Background

India is home to one of the world's largest youth populations, where there are more than 228 million youth between the ages of 15-24 years (India Demographics Profile, 2018). In Rajasthan, a northwest state in India, there are nearly 16 million adolescents, contributing to about 23 percent of the total adolescent population in all of India (Population Council, 2018). Within this state, 35% of girls are married before the age 18 (National Family Health Survey 2015-16), and 6.3% of girls become mothers before they turn 19 (NFHS 2015-16).

In India, women's reproductive trajectories are informed by the interplay between social norms, social status and education (Sanneving et al., 2013). For adolescent girls, this means there is little incentive to promote access to contraceptive services, given the strong expectations to abstain from sex before marriage and to prove one's fertility after marrying (Barua, 2001). Lack of access and awareness of family planning preclude informed decisions, while social stigma and unequal power relations based on gender and age hierarchies, prevent adolescents from acting on their preferences if they wish to postpone their first birth (Jejeebhoy, 2014). Studies in India have shown that the norms of what it means to be a good wife and mother, and the notions of self and collective responsibility influence both use and choice of contraception (Unnithan-Kumar, 2004, Jejeebhoy, 2014). In Rajasthan, many women remain under the control of husbands, fathers, and father-in-laws, which leave them with little autonomy to make informed decisions about contraception (Paul et al., 2017).

In 2014, the government of India launched a comprehensive Adolescent Health Strategy which focuses on providing adolescents with greater access to reproductive health care. Assessing current needs and barriers is a critical step in informing this new strategy while tracking adolescent's contraceptive knowledge, attitudes, and behaviors is important for evaluating the extent to which the new strategy is shifting adolescent sexual and reproductive health indicators in the region. Given that the health of adolescents largely determines the health of adults and future generations to come, it is important that we understand the health needs of this particularly vulnerable population. For this study, we examine the prevalence of contraceptive knowledge and attitudes, and related sociodemographic factors, among adolescent girls in Rajasthan to increase our overall understanding as well inform how future sexual and reproductive programs and policies can best meet the needs of this population.

Methods

Study Population

The present study is drawn from the Performance Monitoring and Accountability 2020 (PMA2020) project in Rajasthan. PMA2020 conducts low-cost, rapid-turnaround representative surveys to monitor key reproductive health indicators in 11 countries in Africa and Asia. The platform rests on a cadre of resident interviewers who collect data using smart phones every 6 to 12 months. In Rajasthan, PMA2020 surveys use a two-stage cluster design including 147 enumeration areas (EAs). In each EA, 35 households are randomly selected from the list of all households in the EA and all females aged 15-49 years from the selected households are invited to participate. The present study is based on the last PMA2020 round of data collection that took place between March and y of 2018. A total of 4,770 women consented to participate (98.4% response rate), including 1,126 adolescent girls 15-19 who, represented 19% of the total sample.

PMA2020 Questionnaire

PMA2020 interviews were carried out face to face by trained resident interviewers in confidential spaces.

The PMA2020 core questionnaire collected a range of socio-demographic information, as well as key reproductive indicators, including age at sexual initiation, pregnancy related information (age at first birth, number of births and pregnancy intentions at last pregnancy) and contraceptive behaviors (knowledge, ever use and current use). To complement the PMA2020 core questionnaire, a specific module was added to allow a more in-depth investigation of adolescents' knowledge, attitudes, and autonomy concerning sexual and reproductive health matters, as well as their need and use for family planning services.

Measures

Based on a series of questions assessing respondent's awareness of each form of contraception available in Rajasthan, we defined four measures of gaps in contraceptive knowledge. A binary measure was first examined if adolescents knew of any method to space or delay a pregnancy (any short acting or long acting reversible contraception). Adolescents who only knew about sterilization were considered to have a knowledge gap. We also considered a more specific knowledge gap measure, distinguishing adolescents who only knew about methods requiring male involvement (condoms, withdrawal, standard days, fertility awareness) from those who knew about female controlled short acting methods (pills, injectable, lam) and those who knew about of long acting reversible contraception (LARCS) including (implants IUDs). Finally, we constructed two additional measures, the first assessing a knowledge gap in any female control methods and the other assessing a knowledge gap of LARCS.

Our key independent measures included adolescent's sociodemographic characteristics (age, caste, education, household wealth, parity, area of residence), adolescent's current need for contraception, defined as ever having a period, being sexually active in the last 12 months, not pregnant or trying to conceive. We also assessed adolescents' exposure to family planning services and messaging, including counseling in the last 12 moths, hearing or seeing about family planning messages on the radio, TV or magazines.

Finally, beyond knowledge gaps, we considered perceptions of stigma and embarrassment as other additional social barriers to adolescent's access to contraception. We used the following two indicators to assess social stigma: "being too embarrassed to seek contraception" and considering that "adolescents or young women who use contraception are seen as promiscuous"

Analysis

After describing the characteristics of the study population, we examined bivariate associations between women's sociodemographic and sexual and reproductive characteristics and their exposure to family planning services and messaging with contraceptive knowledge gaps defined as a two category or four category outcomes. We then conducted a series of logistic regressions to identify factors related to knowledge gap of any reversible method, knowledge gap of any female control reversible method, knowledge gap of LARCs, among all adolescents and among sexually active adolescents. All analyses were weighted to account for complex survey design.

Results

Among the 1,126 adolescent girls, 58% were 15-17 years and 42% were 18-19. Half of the sample identified as Backward caste, 21% were scheduled tribe, 16.7% were general caste and 11% were schedule caste. A majority of adolescents lived in rural areas (68%), with greater representation of scheduled and backward castes in rural environments. 40% of adolescents in rural communities lived in the poorest households (lowest tertile) versus 4.0% of urban adolescents. Most adolescent girls were still attending school, this proportion dropping to 49.6% among 18-19 years.

Very few adolescents were married (only 16%), with 19% reported ever having sex and 4% had ever given birth. At the time of the survey, only 8% of adolescents were in current need of contraception (sexually active, not trying to conceive and not pregnant) and 3.7% were using contraception at the time of the survey. More than half of adolescents had seen family planning messages on TV (58.5%), 42% had seen information on magazines and fewer had heard about family planning messaging on the radio (14.5%). Only 12% of adolescents had received counseling on family planning in the 12 months preceding the survey.

Stigma around adolescent's use of contraception was common, as 41% agreed that adolescents or young women using contraception would be seen as promiscuous and 58% indicated they would feel too embarrassed to seek contraception if they needed it. Fear of being seen as promiscuous was lower among girls who had secondary education or above (37%), but embarrassment did not vary by education, and no other demographic or social background characteristics was associated with these perceptions (data not shown). Likewise, adolescent's contraceptive attitudes were not related to women's current need for contraception, nor to media exposure to family planning massaging or to having received family planning counseling (data not shown).

Altogether 15.7% of adolescents knew of no reversible method to delay or space a pregnancy, 4.8% knew only of methods requiring male involvement, 25.9% knew at least one short acting female control method and half (53.6%) also knew about long acting reversible methods (Table 1).

Younger adolescents, sexually non-active adolescents and girls who were not in need of contraception were less likely to have any knowledge about methods to prevent or delay a pregnancy. Conversely, adolescents who had been exposed to radio, TV or magazine family planning messaging as well as those who received recent family planning counselling were more likely to know about any reversible method. The same factors were related to knowledge about LARCS. In addition, adolescents with the highest level of education were more knowledgeable about LARCs. Results from multivariate analysis (Table 2) mostly confirmed bivariate associations with the knowledge gap decreasing with age, exposure to family planning messaging and counseling and exposure to unintended pregnancy risk (need for contraception). Education had no effect on the knowledge gap with the exception of knowledge about any female reversible control methods, which was higher among the most educated adolescents.

While most adolescents were aware of effective female control methods to space or delay pregnancy (79.4%), 38.6% of these girls feared adolescents would be seen as promiscuous if they used contraception and more than half (53%) felt too shy to seek services for contraception. These social barriers were still prominent among knowledgeable adolescents in need of contraception, as 78.5% feared contraceptive users their age would be labeled as promiscuous and the same proportion (78.5%) would be too shy to seek services.

Discussion

This study examined the prevalence of contraceptive knowledge and attitudes among girls in Rajasthan. We show stigma and embarrassment in seeking contraceptive services are prevalent, and vary little by age, caste, area of residence, media exposure to family planning. Even knowledge about contraceptive methods had little influence on these attitudes. According to a recent qualitative study among women in one rural district of Rajasthan, there is a deeply entrenched norm about having sex without the intention to reproduce. Modern contraception, therefore, is primarily viewed as unfavorable because of the lack of privacy in being able to use these contraceptives secretly (Paul et al, 2017).

In our study, most adolescents (84%) knew at least about one reversible method to delay pregnancy, but many lacked comprehensive family planning knowledge, as less than half (46%) knew about the most effective long acting reversible methods. Knowledge seemed to increase with age and media exposure to family planning messages and counseling, while education had little effect. These results suggest opportunities to strengthen sexual education in schools in order to reach younger adolescents before they become sexually active. Beyond knowledge, such educational programs should also address issues of social stigma, as they represent a strong barrier to access services among the minority of adolescence in need of contraception, potentially contributing to high levels of unmet need in this age group (Jejeebhoy 2014; Barua 2001). However, addressing issues of social stigma cannot rest on adolescent interventions alone, but should engage the ecological system surrounding adolescents, starting with their families, their peer networks and the larger community.

References

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Table 1: Distribution of Knowledge gap by sociodemographic and sexual and reproductive characteristics

		% Knows No reversible methods	% knows only male methods	% knows female short acting	% Knows LARCs	P any yes/No	P LARC Yes/no	P (4 categ knowledge)
All		15.7	4.8	25.9	53.6			
Age at first sex	15-17	21.3	4.8	27.8	46.1	0.000	0.000	0.000
	18-19	7.9	4.8	23.4	63.8			
Residence	Urban	15.7	7.0	18.6	58.8	0.99	0.32	0.31
	Rural	15.7	3.8	29.3	51.2			
Caste	Scheduled caste	19.8	3.5	30.6	46.1	0.63	0.31	0.10
	Scheduled tribe	13.0	3.4	27.3	56.3			
	Other Backward caste	16.3	3.8	26.3	53.7			
	General	10.4	10.7	18.1	60.9			
Wealth tertile	Lowest	16.4	5.7	27.7	50.2	0.40	0.35	0.70
	Intermediate	17.1	4.0	27.4	51.4			
	Highest	13.6	4.9	23.1	58.4			
Highest level of education attended	Never attended	19.8	4.1	27.7	48.4	0.08	0.01	0.14
	primary	19.6	4.9	27.9	47.6			
	Secondary	18.2	5.6	27.6	48.6			
	Higher secondary or above	10.1	4.2	22.8	62.9			
Ever had sexual intercourse	yes	6.6	2.0	20.8	70.6	0.04	0.000	0.004
	no	17.8	5.3	27.1	49.8			
Heard FP messages on radio	yes	2.8	1.9	19.1	76.2	0.001	0.000	0.001
	no	17.8	4.9	26.9	50.6			
Heard FP messages on TV	yes	8.9	5.6	22.8	62.7	0.000	0.003	0.006
	no	25.2	3.7	30.2	40.8			
Read FP messages in magazine	yes	8.0	5.7	21.2	65.1	0.001	0.002	0.000
	no	21.3	4.2	29.5	45.1			
Received FP counseling last 12 months	yes	6.6	2.9	18.3	72.1	0.04	0.001	0.009
	no	16.9	5.1	27.0	51.0			
In current need of contraception*	yes	1.5	1.7	25.5	71.3	0.006	0.003	0.001
	no	17.6	4.9	26.9	50.6			

- In need of contraception includes women who ever had a period, who were sexually active in last 12 months, who were not pregnant or intending a birth in next 2 years

Table 2: Factors related to adolescent's family planning knowledge gap: results from multivariate analysis

		No knowledge of reversible methods			No knowledge of any female control method			No knowledge of LARC		
		AOR	95%CI	p	AOR	95%CI	p	AOR	95%CI	p
All										
Age at first sex	15-17	1		0.001	1		0.003	1		0.002
	18-19	0.4	0.2-0.7		0.5	0.3-0.8		0.6	0.4-0.8	
Residence	Urban	1		0.58	1		0.31	1		0.59
	Rural	0.8	0.3-2.0		1.1	0.3-1.6		1.2	0.6-2.4	
Caste	Scheduled caste	1		0.44	1		0.87	1		0.32
	Scheduled tribe	0.9	0.6-2.2		0.9	0.4-2.1		0.8	0.4-1.5	
	Other Backward caste	0.7	0.3-1.5		0.9	0.4-2.1		0.6	0.4-1.1	
	General	0.5	0.2-1.2		0.8	0.4-1.6		0.6	0.3-1.2	
Wealth tertile	Lowest	1		0.47	1		0.86	1		0.51
	Intermediate	1.0	0.8-2.5		1.0	0.6-1.9		1.3	0.8-2.0	
	Highest	0.9	0.6-3.0		0.9	0.4-2.1		1.3	0.7-2.4	
Highest level of education	Never attended	1		0.76	1		0.55	1		0.22
	primary	1.0	0.4-2.7		1.1	0.4-2.7		1.1	0.5-2.2	
	Secondary	0.9	0.3-2.7		1.1	0.4-2.8		1.1	0.5-2.4	
	Higher secondary or above	0.7	0.2-2.1		0.7	0.2-2.0		0.7	0.3-1.7	
In current need of contraception	yes	0.1	0.0-0.7	0.02	0.1	0.0-0.5	0.003	0.5	0.3-0.9	0.03
	no	1			1		0.01	1		
Heard FP messages on radio	yes	0.2	0.0-1.0	0.05	0.2	0.1-0.7		0.4	0.2-0.8	0.005
	no	1			1		0.05	1		
Heard FP messages on TV	yes	0.4	0.2-0.7	0.03	0.5	0.3-1.0		0.6	0.3-0.9	0.03
	no	1			1			1		
Read FP messages in magazine	yes	0.6	0.3-1.2	0.16	0.8	0.4-1.5	0.43	0.7	0.5-1.1	0.13
	no	1			1			1		
Received FP counseling last 12 months	yes	0.5	0.2-1.3	0.17	0.6	0.3-1.4	0.23	0.5	0.3-0.8	0.005
	no	1			1	1		1		