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Contraceptive practices among adolescent married women in Tamil Nadu, India

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ABSTRACT

Objective: To investigate the contraceptive practices among adolescent married women of Tamil Nadu state, India. **Methods:** We used the data of District Level Household Survey–Reproductive Child Health (DLHS–RCH), Round–II which was conducted in two phases (phase–I during 2002–2003 and phase–II during 2003–2004) in Tamil Nadu. The data consist of 25 522 ever–married women. **Results:** About 92 percent of the subjects are not currently using any of the contraceptive methods. In terms of social characteristics of married women, who were currently using or not using any one of the family planning methods, caste is found to be highly significant ($P < 0.000$). In economic characteristics per cent of using contraception is considerably higher in the women with medium standard of living. Difference between number of children ever born, gravida and using of contraception methods is highly significant ($P < 0.000$). **Conclusions:** Study is indicative of implementation of new programme, which may increase awareness about family planning programme in Tamil Nadu state.

1. Introduction

The Family Welfare Programme in India has experienced significant growth and adaptation over the past half century since its inception in 1951. During this period, financial investments in the programme have substantially increased and service delivery points have significantly expanded. Services administered through the programme have been broadened to include immunisation, pregnancy, delivery and postpartum care, and preventive and curative health care. The range of contraceptive products delivered through the programme has been widened. Multiple stakeholders, including the private sector and non–governmental sector, have been engaged in providing contraceptive services. Of late, the programme has been integrated with the broader Reproductive and Child Health Programme. The couple protection rate has quadrupled from 10 per cent in 1971 to 44 per cent in 1999[1]. Notwithstanding these achievements,

several issues continue to daunt the programme and many goals remain under–achieved: a significant proportion of pregnancies continue to be unplanned; the contraceptive needs of millions of women remain unmet; several sub–population groups including adolescents and men continue to be neglected and under–served; and contraceptive choice remains conspicuous by its absence, as is quality of care within the programme.

Official statistics report that 87 million eligible couples, out of an estimated total of 171 million eligible couples, were effectively protected against conception by various contraceptive methods in the year 2000[2]. Data from National Family Health Survey[3,4], indicate that nearly one–half of currently married women were using some methods of contraception in 1992–1993 and 1998–1999. Contraceptive prevalence increased with age except at the older ages (8 per cent among adolescent girls vs. 67 per cent among women aged 35–39 years)[5]. In Reproductive and Child Health Project (RCH–II)[6], it is also indicating that in India half of currently married women were using some methods of contraception in 2002–2004.

There is lots of study conducted on contraceptive practice,

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users and non users but study on this aspect among adult married women is limited. According to reproductive health survey carried out in Jamaica in 1997 among women aged 15–49 and young adult men aged 15–24, women were more likely to have the best knowledge of contraception compared to men. Oral contraceptive was the most prevalent method used by them while men used condom. Reasons for non-use of contraception vary according to several social and demographic variables[7]. Lagana holds the opinion that societal factors like contradictory, confusing messages on contraception could lead to low contraceptive use[8]. He suggested that sexuality education, contraceptive availability, family-oriented interventions and value of condom use must be emphasized among adolescents toward more effective contraception.

An analysis of the number of adolescent pregnancies and pregnancy outcomes that are averted in the US each year by contraceptive use highlighted the importance of continued and expanded access on the part of young people to contraception. The prevalence of adolescent sexual activity would have to decrease by 83 per cent over current levels to avert the same number of pregnancies that are presently prevented by contraceptive use[9]. The influence of poverty and illiteracy on women's decision to use contraception was surveyed among 883 Mexican women in 1994. Lack of education independently predicted non-use of contraceptives: illiterate women were 1.6 times more likely to have never used contraception than women who had attended secondary school[10].

Bihar, one of India's most populous states had a contraceptive prevalence rate of only 26 per cent. In this state the incidence of sterilization increased significantly as age increased; 11.6 per cent of women aged 21–30 years had undergone the procedure, compared to 51% of women aged 31–40 years. Married women aged 15–20 years were using no contraception. In fact, no woman surveyed had used any contraception before her first pregnancy. 40.3 per cent of women aged 21–30 years and 41.1 per cent aged 31–40 had 2 or more living children, but used no contraception[11,12].

In Tamil Nadu it is indicated that 55 percent currently married women were using any one of the contraception methods RCH-II during 2002–2004. But in adolescent married women in the age group 15–19 years it was reflected that less than ten percent of adolescent women were using any one of the contraception methods in the second National Family Health Survey (NFHS-2), and RCH-II[4,6]. With these view the present study on contraceptive practices among adolescent married women in Tamil Nadu has been under taken.

2. Material and methods

2.1. Data sources

This study used the data collected through District Level Household Survey – Reproductive Child Health (DLHS-RCH), Round-II which was conducted in two phases (Phase-I during 2002–2003 and Phase-II during 2003 –2004) in Tamil Nadu. Data were obtained from 25 522 ever-married women who was covered in the survey. There were 732 adolescent married women in Tamil Nadu who were considered for the study. Table analysis with application of percentage and chi-square is used for the analysis.

2.2. Variables Chosen for the Study

Contraceptive practices among adolescent married women are the dependent variables in this study. And there are several independent variables that influence the dependent variable. These independent variables were broadly classified into social variables; economic variables, demographic variables, environmental sanitation variables and other variables as detailed below:

Social variables: religion, caste, education of women, education of husband and residence.

Economic variables: standard of living, type of house and availability of television / radio.

Environmental sanitation variables: Source of lighting, Type of fuel for cooking and Source of drinking water.

Demographic variables: children ever born, gravida and age at marriage.

3. Results

Among the 732 adolescent married women in the study, 59 (8%) were currently using family planning methods and the other 673 (92%) were not. Uses of family planning methods by adolescent married women are shown in Table 1 according to social characteristics, economic characteristics, demographic characteristics and environment characteristics.

In the state of Tamil Nadu contraceptive use is much higher among the urban women than their rural counterpart. In religion those who are currently using and not using any one of the contraceptive is higher among Hindu. And it is followed by Muslim. Christian religion is the lowest. Among the subjects in the study, other backward class is higher than both who are currently using and not using any one of the contraceptive methods. Scheduled tribe is lowest among both who are currently using and not using any one of the contraceptive methods. In education of adolescent married women those who are having 6–10 years of schooling is higher among both who are currently using and not using any one of the contraceptive methods. And the remaining category of education of adolescent married women shows not much variation among them. Regarding education of adolescent married women's husband, it is similar as education of adolescent married women. Those who are having 6 – 10 years of schooling are higher among

Table 1
Distribution of adolescent women who were currently using/not using family planning methods by different independent variables.

Independent variables			Currently using any family planning method				Chi-square	P-value
			Yes		No			
			N	%	N	%		
Social Characteristics	Place of residence	Rural	32	6.1	493	93.9	9.672	0.002
		Urban	27	13.0	180	87.0		
	Religion	Hindu	49	7.4	612	92.6	5.879	0.053
		Muslim	9	16.7	45	83.3		
		Christian	1	5.9	16	94.1		
	Caste	Scheduled caste	12	4.5	235	95.5	22.023	0.000
		Scheduled tribe	2	12.5	14	87.5		
		Other backward class	45	9.4	424	90.6		
	Education of women	Non-literate	9	6.1	139	93.9	2.708	0.439
		0 – 5 years of schooling	8	7.3	101	92.7		
		6 – 10 years of schooling	34	8.3	378	91.7		
		11 and above years of schooling	8	12.7	55	87.3		
	Education of husband	Non-literate	9	8.4	98	91.6	4.143	0.246
		0 – 5 years of schooling	4	3.9	99	96.1		
		6 – 10 years of schooling	34	8.1	384	91.9		
		11 and above years of schooling	12	11.5	92	88.5		
Education of wife & husband	Non literate – Non literate	3	6.3	45	93.8	1.212	0.750	
	Non literate – Literate	6	6.0	94	94.0			
	Literate – Non literate	6	10.2	53	89.8			
	Literate – Literate	44	8.4	481	91.6			
Economic Characteristics	Standard of living index	Low	16	5.9	253	94.1	9.058	0.011
		Medium	24	7.3	307	92.7		
		High	19	14.4	113	85.6		
	Type of house	Kaccha	17	8.1	192	91.9	1.360	0.507
		Semi-pucca	23	7.0	307	93.0		
		Pucca	19	9.8	174	90.2		
Having TV / radio	Yes	42	9.1	421	90.9	1.738	0.187	
	No	17	6.3	252	93.7			
Demographic Characteristics	Children ever born	0	3	0.8	356	99.2	68.634	0.000
		1	39	12.4	276	87.6		
		2	16	29.1	39	70.9		
		3 +	1	33.3	2	66.7		
	Gravida	0	3	1.0	298	99.0	64.240	0.000
		1	0	0.0	45	100.0		
		2	24	16.0	126	84.0		
		3	13	8.3	144	91.7		
		4 +	19	24.1	60	75.9		
	Age at marriage	Less than 14	6	11.8	45	88.2	8.984	0.011
		15 – 17	43	10.0	385	90.0		
		18 – 19	10	4.0	243	96.0		
Environment Characteristics	Source of lighting	Electricity	54	8.5	585	91.5	1.115	0.573
		Kerosene	5	5.5	86	94.5		
		Other	0	0.0	2	100.0		
	Type of fuel for cooking	LPG-Electricity	23	15.8	123	84.2	15.264	0.000
		Kerosene	4	9.5	38	90.5		
		Wood	32	5.9	512	94.1		

N – Number

both who are currently using and not using any of one of the contraceptive methods. And the remaining category of education of adolescent married women is not much variation among them.

Table 1 shows that education of both wife and husband reflects that the percentage of using contraception method

and not using were higher among both husband and wife literate. In the category the lowest was both wife and husband non-literate. The remaining category in which any one of them wife or husband literate was not that much of variation. In social characteristics of adolescent married women who were currently using or not using any one of the

family planning methods caste is highly significance ($P = 0.000$). The other variables place of residence and religion is significance ($P < 0.05$). Remaining variables education of women, education of husband and education of both husband and wife is not significance ($P > 0.05$).

Table 1 also reveals the use of contraception by economic characteristics of adolescent married women in Tamil Nadu. Regarding standard of living index of adolescent married women in the study, the percentage of using and not-using contraception methods was more among medium standard of living adolescent married women. In type of house the percentage of using and not-using contraception methods was higher among semi-pucca. It is followed by pucca and kaccha. Regarding economic status the percentage of using and not-using contraception methods was more among the adolescent women having TV/Radio. Further, the proportion of using and not-using contraceptive methods among adolescent married women not having TV/Radio was 6 per cent and 94 per cent respectively. It is clear from Table 1 that economic characteristics of adolescent married women had shown significant difference on using of family planning methods among the variable standard of living index ($P < 0.05$). The other economic variables type of house and having TV/Radio had not shown any significant difference on using family planning methods ($P > 0.05$).

In terms of demographic characteristics of adolescent married women in Tamil Nadu state, the percentage of using contraception methods among children ever born is higher among those who having one children, it is followed by those who having two children ever born. And it is interesting to see that those who having no children having one per cent and child having more than 3 children 33 per cent. The percentage of not-using contraception methods among children ever born is higher among those who having no children, and it's followed by those who having one children ever born. In gravida the percentage of using contraception methods is higher among those who having two gravida, the proportion is followed by whom having more than four gravida. In case of age at marriage the percentage of using and not-using contraception methods is higher in the age group 15 – 17 years, the proportion it followed by in the age group 18 – 19 years and those who married less than 14 years. It also can be seen from Table 1 that the difference between number of children ever born, number of gravida and using of contraception methods was highly significant ($P = 0.000$) and there was significant difference between age at marriage and using of contraception methods ($P < 0.05$).

The percentage of using and not-using contraception methods among source of lighting is higher among electricity, kerosene is next higher among those who using for source of lighting and other type of source of lighting in which those who were not-using contraception was not giving that much variation. Among type of fuel for cooking the percentage is higher in those who are using wood, the proportion is followed by those who are using LPG–

electricity and kerosene. As for source of drinking water the percentage of using and not using contraception methods is higher among those who are using tap. It can be seen from Table 4 that the difference between type of fuel for cooking, and using of contraception methods was highly significant ($P = 0.000$) and there was significant no difference between source of lighting, source of drinking water and using of contraception methods ($P > 0.05$).

Among those who desired next child by sex in the state of Tamil Nadu, the number of women who desired the next child to be a boy was 129 (20%) and to be a girl was 53 (8%). The number of sex that was not preferred and up to god was 367 (57%) and 96 (15%) respectively.

Figure 1 presents data on the current use of family planning methods among the 59 adolescent married women and by their husbands. Forty-six per cent who were currently using contraceptive methods used IUD/copper-T/loop, those who were using female sterilization accounted for 31 per cent.

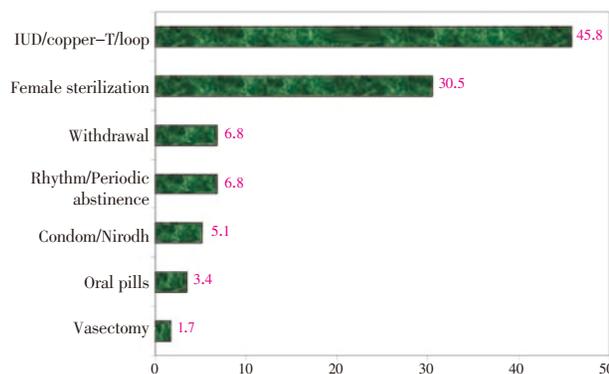


Figure 1. Percentage of current family planning methods used by adult women/their husband.

Table 2

Distribution of currently not-using any one of family planning methods by adolescent women.

Reasons not using any methods	Number	%
Lack of knowledge	8	3.7
Against religion	5	2.3
Opposed to family planning	2	0.9
Husband opposed	12	5.6
Other people opposed	4	1.9
Do not like existing methods	9	4.2
Afraid of sterilisation	1	0.5
Can not work after sterilization	2	0.9
Worry about side effects	30	14.0
Costs too much	2	1.0
Health does not permit	45	21.0
Hard/Inconvenient to get method	1	0.5
Inconvenient to use method	1	0.5
Difficult to become pregnant	10	4.7
Other	82	38.3
Total	214	100

Table 2 shows adolescent married women's reasons for not using family planning methods. More than one-third of the adolescent married women told other reason for not using

any family planning methods, followed by health does not permit (21%).

4. Discussion

Literacy has an important role to enable women to comprehend their overall development. It is well understood that higher level of education lead to a greater awareness and bring about a prosperous change in the socio-economic status of any society. Women's education has a significant role in family planning behavior. In almost every setting, regardless of religion, culture and level of development, well educated women are found to opt more the contraceptive methods. In the present study the currently married women of Tamil Nadu are found that the percentage of using contraception method and not using were higher among both husband and wife literate. This indicates lack of awareness of the benefit of this method in currently married women in Tamil Nadu. It can also be inferred that effort should be made to improve overall status of women by improving their level of educational attainment and raising their active participation in economic activities for better position. This, in turn, will help them to have more autonomy in decision making to contraceptive use.

There is a substantial increase in the awareness of contraceptive practices in the state of Tamil Nadu. As evident from NFHS Survey it has increased from 50 per cent^[3] to 61 per cent^[13]. This study overcame a key challenge to gaining a true community-based awareness. Awareness of contraception has been emerged as an important intervention to reduce burden of unwanted pregnancy and promote healthy living among young women. As per the NFHS 3 estimates^[13], the unmet need for family planning for the state, Tamil Nadu as a whole is about 8.2 per cent. The unmet need for family planning is alarmingly high among adolescent married women (4.1% for spacing and 4.8% for limiting). The present paper examines some of these aspects using data from the three rounds of National Family Health Surveys conducted by the International Institute for Population Sciences, Mumbai^[3,4,13].

The above finding clearly indicates that the family planning programme in the state has made very limited progress as far as its penetration among adolescent married women. It is very puzzling to note that despite six decades of the existence of the national family planning programme, the Indian adolescent married women has hardly benefitted from it. Thus there is a need of implementation of new programme which may increase awareness in Tamil Nadu. Programs are also needed that would address the need of the adolescent married women in a more friendly manner.

In fine policy makers and programmers implementations in Tamil Nadu may formulate new strategy to increase the awareness about family planning methods among adolescent married women in order to prevent information education

and communication (IEC) materials to the following groups: adolescent married women in rural areas, adolescent married women in the age of 15 –17 years, adolescent married women with living one child and adolescent married women to be educated to use family planning without any fear for the family planning method failure or side-effects.

Conflict of interest statement

We declare that we have no conflict of interest.

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