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Original Research Article

A study on reproductive health of adolescent girls of Dongria Kondh tribe

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ABSTRACT

Background: Health problem in adolescent girls are different from the younger children and older adults. In the tribal population they are more neglected because of limited health care facilities and lack of education. In the present study we have done assessment of reproductive health status of adolescent girls in the Dongria Kondh tribe in Odisha.
Methods: Dongria Kondh' residing in Rayagada district of Odisha having its maximum concentration was studied. Bissam Cuttack block was selected randomly as the study area. Moreover, coincidently majority of the study population resided in the block having villages like Kurli, Khambesi, Hundijali, Muthesi, Khajuri, Mundabali and Uppar Gandatallli which are situated as a distance of 5000 ft height above sea level. 89 adolescent girls were considered Schedule of general information of the family, schedule cum questionnaire on KAP on reproductive health and Lab investigation done among study subjects for prevalence of HIV/AIDS was done.
Results: About 75% of adolescent girls had regular menstruation. Dysmenorhoea was present in 13% of girls. All girls are poor menstrual hygiene.84% of adolescent girls knew about menstruation from their friends. About 61% were not aware about physical changes in pregnancy.
Conclusions: Counseling of adolescent girls and their mothers on sexual hygiene should be done by AWW/HWF. Health care delivery system to be strengthened by training and capacity building of AWW/HWF.

Keywords: Adolescent, Dongria Kondh, Reproductive

INTRODUCTION

WHO defines the adolescent period between 10-19 years of age. In India adolescent girls comprise about 10% of population. Young people are defined by WHO between 10-24 years of age. There are about 1.7 billion young people aged 10-24 years in the world today. The transition period between careful childhood and responsible adulthood is the key factor in determining the future health of the individual.[1] Health problem in adolescent girls are different from the younger children and older adults. They are more likely a victim because of limited resources. Hence their health in of utmost importance as they are the future generation who will build nation and the world at large.[2] Good reproductive health really begins in adolescence.

About half of the total world's indigenous people referred to as tribal group/scheduled tribes) live in India. "The tribal population constitutes 22.21% of state total population.[3]

Odisha occupies 2nd place in term of tribal population in the country.[4] In view of this the present study makes an assessment of reproductive health status adolescent girls in the Dongria Kondh tribe in Odisha.

METHODS

Adopting a tribe specific approach, the reproductive health status of adolescent girls of one of the major tribes, 'Dongria Kondh' residing in Rayagada district of Odisha having its maximum concentration was studied extensively. Out of 3 blocks of the district, Bissam Cuttack block was selected randomly as the study area. Moreover, coincidently majority of the study population resided in the block having villages like Kurli, Khambesi, Hundijali, Muthesi, Khajuri, Mundabali and Uppar Gandatallli which are situated as a distance of 5000 ft height above sea level. All the adolescent girls who have attended menarche and willing to participate were taken as study population. In case 2 eligible adolescent girls came from one household, then one was randomly selected. Out of three blocks 10% comprise of adolescent girls population i.e. 885 adolescent girls. Out of this only 10% i.e 89 adolescent girls were considered. However 4 extra girls because of their enthusiasm & interest were included as the study subjects and final analysis was done with respect to 93 adolescent girls. Study instruments were schedule of general information of the family, schedule cum questionnaire on KAP on reproductive health and lab investigation done among study subjects for prevalence of HIV/AIDS.

RESULTS

Out of all studied girls 92.47% were unmarried.6.47% were married.81.3% belong to nuclear family as shown in Table 1.

Age of onset of menarche was at 12-14 years in 74.19% of girls followed by 21.51% in 14-16 years as shown in Table 2.

Nature of menstrual history was comparable in all age groups as shown in Table 3.

Regarding menstrual hygiene all the girls use old cloth and don't take bath as shown in Table 4.

None of girls had knowledge about AIDS and 1.49% had AIDS as shown in Table 5 and 6.

Table 7 elaborates knowledge about reproductive health.

Table 8 and 9 elaborates knowledge about birth spacing and place for safe delivery and table 10 shows knowledge about contraception.

Table 11 and 12 shows pubertal rites and practices during menstruation**.**

DISCUSSION

The mean age is 12.74 ± S.D. 0.943 yrs. Out of 93 study subjects, 04 (4.3%) girls had attained menarche between 10 – 12 yrs, 69 (74.19%) between 12 – 14 yrs and 20 (21.51%) between 14 -16 yrs, whereas the mean menarche age was 15.2yrs in Banga tribe of MP. [5]About 7.52% girls had passage of clots while menstruation and pain during menstruation was present in approximately 13% girls. In a study done amongst urban adolescent girls of Pune, dysmenorrhoea was found in 68.3%. [6]In another study, the rural adolescent girls in India nearly 84% had regular periods and dysmennorhea was found in 62%

Table 1: General information of the study subjects.

Sl. No	Variable	(10-14) years (No.)	%	(15-19) years (No.)	%	No.	%
1	No. of Adolescent Girls	18	19.4	75	80.6	93	100
2.	Marital Status						
	Married	0	0	6	8	6	6.47
	Unmarried	18	100	68	90.7	86	92.47
	Widow	0	0	1	1.3	1	1.08

Table 2: Age of onset of menarche.

	Age of menarche					
Age of menarche in years	(10-14) years (no.)	%	(15-19) years (no.)	%	No.	%
10 – 12 years	3	16.7	1	1.3	4	4.30
12 -14 years	15	83.3	54	72.0	69	74.19
14 – 16 years	0	0	20	26.7	20	21.51
Total	18	19.4	75	80.6	93	100

Table 3: Nature of menstrual cycle.

Sl. No	Variable	Age in Years					
		(10-14) years	%	(15-19) years	%	No.	%
1	Type						
	Regular	11	61.11	59	78.67	70	75.67
	Irregular	7	38.89	16	21.33	23	24.73
2	Nature of flow						
	Scanty	0	0	0	0	0	0
	Average	18	100	70	93.33	88	94.62
	Heavy	0	0	5	6.67	5	5.26
3	Pain during menstruation						
	Present	2	11.11	10	13.33	12	12.19
	Absent	16	88.89	65	86.67	81	87.1
4	Duration of Flow						
	< 3 days	0	0	2	2.66	2	2.15
	3 – 5 days	17	94.44	56	74.67	73	78.5
	> 5 days	1	5.56	17	18.27	18	19.4
5	Inter menstrual bleeding						
	Present	1	5.56	0	0	1	1.07
	Absent	17	94.44	75	100	92	98.92
6.	Passage of clot						
	Yes	1	5.56	6	8	7	7.52
	No	17	94.44	69	92	86	92.87
7	No. of Pads Used / day						
	1 – 2	7	38.89	8	10.67	15	16.12
	3 – 4	11	61.11	67	89.33	78	83.87
	5 – 6	0	0	0	0	0	0
8	Duration of Cycle						
	<25	0	0	0	0	0	0
	25 – 30	14	77.77	54	72	68	73.12
	> 30	4	22.23	21	28	25	26.88
	Total	18	19.40	75	80.60	93	100

Table 4: Menstrual hygiene score.

Sl. No.	Factors related to menstrual Hygiene	No	%
1	Use of Pads		
	Old clothes used & reused	93	100
	Old clothes once used & discarded	0	0
	Sterilized (discarded clothes)	0	0
2	Storage of pads		
	Cowshed / tree holes	93	100
	Clearly preserved with other clothes	0	0
3	Taking Bath during periods		
	Yes	0	0
	No	93	100
4	Pads after use dried Shade / hidden under other clothes	93	100
	Sun	0	0
	Total	93	100

Table 5: Prevalence of HIV/AIDS among study subjects.

HIV Test	(10-14) years	%	(15-19) years	%	No.	%
Positive	1	1.08	0	0	1	1.49
Negative	10	90.91	56	100	66	98.51
Total	11	16.42	56	83.58	67	100

Table 6: Knowledge of Study Subjects on HIV/AIDS.

Response	Opinion of Girls				Total	
	No	%	No	%	No.	%
Yes	0	0	0	0	0	0
No	18	100	75	100	93	100
Total	18	19.60	75	80.40	93	100

Table 7: Knowledge regarding reproductive health.

Sl. No.	Response	Opinion of Girls					
		(10-14) years	%	(15-19) years	%	No.	%
1	Menstruation of girl child (perceived)						
	Normal	10	55.56	75	100	85	91.40
	DNK	8	44.44	0	0	8	8.60
2	Usual age of menarche (yrs)						
	10 – 12	0	0	6	8	6	6.45
	12 – 14	8	44.44	69	92	77	82.80
	14 – 16	0	0	0	0	0	0
	16 – 18	0	0	0	0	0	0
	DNK	10	55.56	0	0	10	10.75
3	Minimum legal age of marriage						
	18 yrs	0	0	0	0	0	0
	< 18 yrs	0	0	0	0	0	0
	DNK	18	100	75	100	93	100
4	Antenatal Checkup						
	Essential	0	0	15	20	15	16.13
	Not Essential	0	0	0	0	0	0
	DNK	18	100	60	80	78	83.87
5	Ideal age of 1st Pregnancy						
	< 18 yrs	0	0	0	0	0	0
	≥ 18 yrs	0	0	0	0	0	0
	DNK	18	100	75	100	93	100
6	Abortion facility available at Govt. Hospital						
	Yes	0	0	0	0	0	0
	No	0	0	0	0	0	0
	DNK	18	100	75	100	93	100

Table 8: Knowledge regarding safe place of delivery.

Age in years	Delivery Place				No. of Responses		Total	
	Hospital		Home					
	No	%	No	%	No	%	No	%
10 - 14	0	0	8	44.44	10	55.56	18	19.40
15 -19	0	0	68	90.67	7	9.33	75	80.60
Total	0	0	76	81.72	17	18.28	93	100

Table 9: Knowledge regarding birth spacing.

Birth Spacing	Age of Girls				Total	
	(10-14) years	%	(15-19) years	%	No.	%
< 3 yrs	0	0	11	14.67	11	11.83
Minimum of 3 years	0	0	2	2.66	2	2.15
DNK	18	100	62	82.67	80	86.02
Total	18	18.40	75	80.60	93	100

Table 10: Awareness about contraception.

About Contraception	Age of Girls				Total	
	(10-14) years	%	(15-19) years	%	No.	%
Aware	0	0	0	0	0	0
Not Aware	18	100	75	100	93	100
Total	18	19.40	75	80.60	93	100

Table 11: Pubertal rites at the onset of menarche.

Different Aspects	Total	
	No.	%
Isolation in rooms		
Yes	93	100
No	0	0
Isolated for 7 days		
Yes	93	100
No	0	0
Bathed during this period		
Yes	0	0
No	93	100
Celebration at the end of Isolation		
Yes	0	0
No	93	100
Total	93	100

Table 12: Common practices followed during menstruation.

Common Beliefs	No of study subjects	%
Do not goes temple	93	100
Do not touch puja things	93	100
No cooking	93	100
Did not go to sleep in the dormitory	93	100
Slept in the last room of the house	93	100
Went out of the house from back door	93	100
Did not talk to men	93	100
Went to Dongar for work	93	100
Total	93	100

girls.[7] None of the 7 married adolescent girls had even used any methods of contraception. Out of 12 adolescent girls having dysmenorrhoea about 50% used the locally available herbs where as 42% kept them engaged in other activities. Only 8% consulted health care providers. Menstrual hygiene score was categorized as poor, average and good in the range (05-06), (07-08) and (09-11) respectively. All 93 study subjects had poor score. Out of 67 adolescent girls who gave blood for HIV testing 1(1.49%) tested positive and the adolescent girl

belonged to the early adolescent period. About 44% in the early adolescent period were ignorant that menstruation is a normal phenomenon. About 55% of early adolescent girls did not know about the usual age of menarche. The observed low level of knowledge regarding birth spacing in the present study lacks of proper implementation of RMNCH+ programme and underutilization of services rendered by it. In the present study none of the adolescent girls had any knowledge about contraception & different methods. Tekre et al in 1989 it was observed that almost all tribal women of Juansarias & Santals were found to be aware of family planning methods whereas only 16% of Dudh Kharias women were aware of family planning methods.[8]About 94% of girls were not aware about the extra dietary needs during pregnancy and 89% of girls were of the idea that extra list was not required during pregnancy. Only 6% of the adolescent girls were aware about menarche. About 8% of the girls in the late adolescence knew about the requirement of nutritious food during pregnancy. In a study conducted by Raseed et al found that half of the adolescent girls of 12-15 years of age had no knowledge of menstruation before it onset.[9]Hasan M. K. et al in his study found Saira female tribal adolescent had less reproductive health awareness than christain tribal adolescents.[10] None of the study subjects had heard about AIDS or about how HIV/AIDS were spread and how it could be prevented. In a study in rural Pune 24 adolescent girls (18%) were aware that some diseases were spread through sexual intercourse and AIDS was found to be most commonly known disease. Another study of urban adolescent girls in Pune by Ganguly et al revealed that about 86% girls were aware of HIV/AIDS and its transmission through sexual relationship, contaminated blood transmission and needle.[7]

Body mapping was used to identify, point sharing correctly in a diagrammatic representation of human body the exact location from where menstruation occurs. About 58% of the study subject had wrong idea about the exact place of menstruation.

CONCLUSION

About 75% of adolescent girls had regular menstruation. Dysmenorhoea was present in 13% girls. All girls are poor menstrual hygiene.84% of adolescent girls knew about menstruation from their friends. About 61% were not aware about physical changes in pregnancy.68% of girls did not know common sign of pregnancy. None of the study subject was aware about HIV/AIDS & STI/RTI. Only one girl tested HIV positive. Counseling of adolescent and their mothers on sexual hygiene should be done by AWW/HWF. Health care delivery system to be strengthened by training and capacity building of AWW/HWF. Local tribal girls should be trained by health functionaries so that they impart health education to their peer group on different aspect of menstrual and personal hygiene and sexual practices (Girl to girl approach).

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REFERENCES

1. WHO Adolescents: health risks and solutions. 2016.
2. WHO, Women's Health; Improve our Health, Improve our World. Paper presented at 4th World Conference on women, Geneva. 1995;2.1-218.
3. ICMR Bulletin 2003, RMRC Bhubaneswar. 2003:33(10).
4. Mahapatra. Tribes of Orissa, SC & ST, R&TI BBSR. 2008;4:29-38.
5. Reddy PH. The Barga tribes of Madhya Pradesh; A J Biolog Sci; 1997;29:19.
6. Majumdar. A study of Adolescent girls in Pune; Health & Population- Perspective & Issue 2000;23(2);95-104.
7. Ganguly SK. Adolescent Health. Indian J Public Health. 2003;47(13).
8. Sekhar. The impact of family welfare programme on tribal woman. An annual report of the family welfare of India-31. 1989
9. Hasan. Reproductive Health Awareness in female students; Role of religion and level of education; Indian J Psychological Issue. 2001;9(20):67-75.
10. Raseed. Communication and advocacies strategies on Adolescent Reproductive & Sexual Health; UNSECO; 37. 1972.

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