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ORIGINAL ARTICLE

Awareness regarding puberty changes in secondary school children of Bagalkot, Karnataka”- A cross sectional study

DORLE A S, HIREMATH L D, MANNAPUR B S, GHATTARGI C H

ABSTRACT

Research Question was whether the students are aware regarding secondary sex characters during puberty and also regarding STI and RTI and to know what the sources of their information are. Objectives were to evaluate the awareness regarding puberty changes in both boys and girls also to find out the necessity of the subject of sex education in the curriculum and to find out the source of information of the respondents. It was a cross sectional study conducted in Basaveshwar High school, Bagalkot, the Participants were 8th, 9th and 10th Standard students. The data was collected by using pre- tested and pre- designed proforma. The results obtained were as follows: 1) Out of 502 students, 394 (78.49%) were boys and 108 (21.51%) were girls. 2) Only 19.80% of the boys and 9.25% of the girls had correct knowledge regarding secondary sex characters. 3) About 45.18% of boys discussed sex matters with their friends and unlike the boys, 55.56% of the girls discussed it with their parents. 4) Nearly ¾th of the (74.07%) girls did not have prior knowledge about menstruation and 66.7% of the girls used unhygienic pads during menstruation. 5) 41.23% of the students mentioned the inclusion of sex education from higher secondary school. Half of the students did not specify regarding the inclusion of sex education in the curriculum. 6) Only ¼th of the boys and girls had correct knowledge about Sexually Transmitted Diseases. 7) About 58.62% of the boys and 60.18% of the girls had either correct or some knowledge about HIV transmission. 8) 52.28 % of the boys and 46.26% of the girls had either correct or some knowledge regarding the prevention of HIV/AIDS. 9) 51.52% of the boys got the information through television, while only 40.74% of girls got the information through television.

*,**,***Asso. Professor, Dept. of Community Medicine
S.N.Medical College, Bagalkot.
4. Dr. C. H. Ghattargi
Professor and HOD, Dept. of Community Medicine
S.N.Medical College, Bagalkot.

Corresponding Author:
Dr.A.S.Dorle, E-mail:ashok.dorle @rediffmail.com
Contact number +919448408244

Introduction:

Puberty changes among adolescents are an important stage in everybody's life. Adolescents undergo significant physical and cognitive changes during their pubertal development. These changes contribute to and impact their future development. Educating adolescents at an

early age about their expected development decreases the possible anxiety which is associated with this period of life and also helps adolescents make better choices with regards to their sexuality[1].

Now- a- days, adolescent health problems are a growing concern all over the world. The health behaviour of adolescents may be risky and perverted, not only to their own health and well being, but also to the society.

Material and Method:

The present cross-sectional study was carried out to assess the awareness regarding puberty changes in secondary school children. All

students on the roll in classes VIIIth, IXth and Xth constituted the study objects.

A list of all the secondary schools in Bagalkot city was obtained from the Education Department Zilla Parishad, Bagalkot, from which this one school was randomly selected. Permission was obtained from the concerned authorities after apprising them about the purpose of the study. In a single setting, all the students (502) were given the pre-designed proforma and were asked to write the answer to the questions without consulting other students. The information collected on the proforma was kept anonymous.

Results

[Table/Fig 1] shows that there was a significant difference of correct knowledge regarding secondary sex characters among boys and girls.

[Table/Fig 1]: Table showing the knowledge of boys & girls regarding secondary sex characters.

Students	Correct		Partially correct		Do not know		Total	
	No	No %	No	No %	No	No %	No	No %
Boys	78	19.80	286	72.59	30	7.61	394	100
Girls	10	9.25	88	81.50	10	9.25	108	100
Total	88	17.53	374	74.50	40	7.97	502	100

P<0.02

[Table/Fig 2] shows that about 45.18% of the boys discussed sex matters with their friends. Unlike boys, 55.56% of the girls discussed it with their parents.

[Table/Fig 2]: Distribution of respondents according to their discussion on sex matter

Students	Boys		Girls	
	No	%	No	%
Friends	178	45.18	31	28.70
Parents	115	29.19	60	55.56
Cousins	13	3.29	6	5.56
Others	44	11.17	5	4.62
Do not know	44	11.17	6	5.56
Total	394	100%	108	100

[Table/Fig 3] shows that a majority (74.07%) of the girls did not have any prior knowledge about menstruation. [Table/Fig 4] shows that a majority i.e. (66.67%) of the girls used unhygienic pads.

[Table/Fig 3]: Distribution of respondents according to their prior knowledge about menstruation

Students	Yes		No	
	No	No %	No	No %
Girls	28	25.93	80	74.07

[Table/Fig 4]: Distribution of respondents according to the type of pads used during menstrual period

Students	Hygienic		Unhygienic		Total	
	No	No %	No	No %	No	No %
Girls	36	33.33	72	66.67	108	100%

[Table/Fig 5] shows that 41.23% of the students mentioned the inclusion of sex education from higher secondary school, while half of the students did not specify about the inclusion of sex education in the curriculum.

[Table/Fig 5]: Distribution of respondents according to their opinion towards inclusion of sex education in the curriculum

Students	Secondary		Higher secondary		Not specified		Total	
	No	No %	No	No %	No	No %	No	No %
Boys	28	7.10	162	41.12	204	51.78	394	100
Girls	8	7.40	45	41.67	55	50.93	108	100
Total	36	7.17	207	41.23	259	51.60	502	100

[Table/Fig 6] shows that there was no significant difference of knowledge regarding sexually transmitted diseases among boys and girls.

[Table/Fig 6]: Distribution of respondents according to their knowledge about sexually transmitted diseases.

Students	Correct		Not correct		Total	
	No	%	No	%	No	%
Boys	97	24.61	297	75.39	394	78.48
Girls	28	25.92	80	74.08	108	21.52
Total	125	24.90	377	75.10	502	100

[Table/Fig 7] shows that there was no difference of knowledge among the respondents regarding the transmission of AIDS among boys and girls.

[Table/Fig 7]: Distribution of respondents according to their knowledge regarding transmission of aids.

Students/ Knowledge	Boys		Girls		Total	
	No	%	No	%	No	%
Correct	46	11.67	12	11.11	58	11.56
Partially Correct	231	58.62	65	60.18	296	58.96
Do not know	117	29.69	31	28.70	148	29.48
Total	394	78.49	108	21.51	502	100

[Table/Fig 8] shows that there was no difference of knowledge between the boys and girls regarding the prevention of AIDS.

[Table/Fig 8]: Distribution of respondents according to their knowledge regarding prevention of aids

Students/ Knowledge	Boys		Girls		Total	
	No	%	No	%	No	%
Correct	29	7.36	8	7.40	37	7.37
Partially Correct	206	52.28	50	46.26	256	50.99
Do not know	159	40.35	50	46.26	209	41.64
Total	394	78.48	108	21.52	502	100

[Table/Fig 9] shows that a majority (51.52%) of the boys obtained information on sex through the television, whereas only 40.74% of the girls obtained information on sex from the television.

[Table/Fig 9]: Distribution of respondents according to the sources of information

Students/ Knowledge	Boys		Girls		Total	
	No	%	No	%	No	%
Correct	29	7.36	8	7.40	37	7.37
Partially Correct	206	52.28	50	46.26	256	50.99
Do not know	159	40.35	50	46.26	209	41.64
Total	394	78.48	108	21.52	502	100

Observation and discussion

In our study, out of 502 students, 394 (78.49%) were boys and 108 (21.51%) were girls.

In our study, it was found that only 19.80% of the boys and 9.25% of the girls had correct knowledge regarding secondary sex characters. There was significant difference of correct knowledge regarding secondary sex characters among boys and girls.

In Koff and Rierdan’s[2] study, it was found that the knowledge of the girls regarding the location and the functions of the reproductive structures have been found to be faulty and most of them had incomplete knowledge about these. In Nair Parvathy’s[3] study, it was found that only 33.4% of the girls were aware of all the pubertal changes.

In our study, it was found that about 45.18% of the boys discussed sex matters with their friends. In a study done by R H Paradkar[4], it was reported that 80.4% of the students discussed sex matters with their friends. Unlike the boys, 55.56% of the girls discussed it with their parents. Omar H[1] reported that 20% of the girls discussed the sex matters with their parents. Discussion with friends can be dangerous because friends are not a reliable source,

whereas discussion with parents is a good attitude.

In our study, it was found that nearly ¾th of the (74.07%) girls did not have prior knowledge about menstruation. Archana Joshi[5] reported that 50% of the women didn’t have prior knowledge regarding menstruation. In Nair Parvathy’s study, it was found that 54.5% of the girls didn’t have prior knowledge regarding menstruation. Ahuja et al[6] also reported lower levels of awareness as seen in their study (28%). In all these studies, prior knowledge regarding menstruation was less and this indicated the necessity of sex education in the curriculum.

In our study, it was found that 66.7% of the girls used unhygienic pads during menstruation. In Archana Joshi’s study too, it was found that 87% of the woman used unhygienic pads. The difference between our study and Archana Joshi’s study was that Archana Joshi’s study setup was in rural areas.

Both boys and girls opted for sex education. 41.23% of the students mentioned the inclusion of sex education from higher secondary school. Half of the students did not specify about the inclusion of sex education in the curriculum because either the students were confused or didn’t know the answer.

In our study, it was found that only ¼th of the boys and girls had correct knowledge about Sexually Transmitted Diseases.

About 58.62% of the boys and 60.18% of the girls had either correct or some knowledge about HIV/AIDS transmission. In the study by Paradkar et al, it was reported that 50.1% of the students had correct knowledge regarding the transmission of HIV/AIDS.

In our study, it was found that 52.28% of the boys and 46.26% of the girls had either correct or some knowledge regarding the prevention of HIV/AIDS. Paradkar et al reported that 45.72% of the students had correct knowledge regarding the prevention of HIV/AIDS. In the study done by Anita Nath[7], she found that the knowledge regarding the prevention of HIV/AIDS in boys

was 71.6% and in girls it was 72.4%. In all the studies, it was found that the correct knowledge regarding HIV / AIDS was lacking.

In our study, it was found that 51.52% of the boys and 40.72% of the girls got the information on sex through television. Paradkar et al reported from their study, that the source of information on sex from the television was 93.3%. The difference between our study and Paradkar's study was that Paradkar's study setup was done in a metropolitan city.

Conclusion:

The correct knowledge regarding puberty changes, STDs and HIV/AIDS is lacking in both boys and girls. So, this indicates the necessity of the inclusion of sex education in the curriculum. Drakshayani Devi K and Venkat Ramaiah P[8] suggested that compulsory sex education is required in the curriculum.

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