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A Review on Attitudes towards Puberty Among Adolescents Girls

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ABSTRACT

The more than twenty online studies were reviewed to study the attitudes towards puberty of adolescent's girls. It was found that for the last few years, that there was no difference regarding attitudes between rural and urban participants. The review of various studies revealed that the knowledge of puberty and sexual health among the female adolescents of middle income families is lacking.

Keywords: Adolescents Girls, Attitudes, Puberty

I. INTRODUCTION

Puberty is the period in the developmental span when the child changes from an asexual to a sexual being. Puberty is that stage in development during which maturation of the sexual apparatus occurs and reproductive capacity is attained. It is accompanied by changes in psychological perspective along with somatic ones. After successful passing through the changes and challenges of pubertal phase boys and girls are granted the rights and privileges of adulthood and are considered equipped to take the responsibilities of upcoming age. Puberty must be regarded as an overlapping period because it encompasses the closing years of childhood and the beginning years of adolescence.

The first apparent indication of puberty among girls is menarche or the first flow. These internal changes are known as primary sex characteristics such as maturation and activation of fallopian tubes, ovaries and vagina whereas secondary sex characteristics are in the form of changes in body shape such as roundening of hips, enlargement of the pelvic bone, enlargement of the breast, appearance of pubic hair and development of subcutaneous fat.

Along with these physical changes puberty also brings changes of young girls. Desire for isolation, boredom and in-coordination, social antagonism, heightened emotionality, loss of self confidence excessive modesty are common in puberty.

Although changes of puberty are biological rooted but they have their own social and ecological implication. These pubertal changes are usually accompanied by some physiological discomforts, problems and with typical attitudes of society. Therefore it is a period in which a girl needs time for transition. The way transition take place will influence her future adjustment self esteem and health status. In order to effectively deal with this transition phase they require proper information about changes taking place in their body. In this phase of life mental preparation is required so that girls can overcome this stress effectively.\

II. OBJECTIVES

- To review and analyze the published literature on the pubertal changes faced by adolescents girls.
- To study the attitudes towards puberty among adolescents girls.

III. METHODOLOGY

This study included researches conducted in India and abroad, published in various online journals.

IV. REVIEW OF LITERATURE

Akbar et al (2001) Conducted "a study to determine the anthropometric indexes and their relationship with menarche age in female students of Subzevar, Iran.130 students by multi-stage probability sampling. The results indicated that the menarche age and BMI are

significantly related and the higher the BMI the lower the menarche age".

H. Tiwari et al (2006) Investigated "knowledge attitudes and a belief towards menstruation were made in 22 schools in Anand district, Gujarat state. 900 school girls aged 11-17 years was selected. Results revealed that 38.5% felt comfortable about menarche and 31.0% believed that menstruation was a normal physiological process.(37.2%) had not been informed about menarche before its onset and 48.2% felt they were not mentally prepared. The major sources of information were mother (60.7%) or an elder sister (15.8%) teachers and others relatives played a small role."

S. P Singh et al (2006) examined "Study was carried out among school and intermediate college going adolescent girls from 7th to 12th standard (10-19 years age) in the district of Varanasi, U.P. Total sample size was 504. Resultsrevealed thatonly 45.6% of the study subjects obtained more than 50% score. Girls reach puberty before boys and menstruation makes women capable of child bearing was correctly known to more than two-thirds of the study subjects. More than half of the girls did not know that during menstruation blood comes from uterus/vagina. 84.9% stated that it is dangerous to swim and run during periods. 84.9% stated that their first source of information related to menstruation was their mother."

Tazeen Saeed et al (2006) studied "the understanding and level of knowledge related to puberty and related health problems among female adolescents of Karachi, Pakistan. Data was collected from 150 female adolescents between 10-19 years of age. Result revealed that 66% of the participants were aware of the names of reproductive organs. Majority of the participants received information related to sexuality from their mother. Sixty seven percent (67%) of the participants did not know about self breast examination & cable & internet were cited as a major source of puberty and sexual health related information."

Tamarra. J. T et al (2007) Evaluated "the association between childhood socioeconomic status (SES) at two time points and age at menarche in a multiracial sample of U.S girls. Multivariable linear regression was used to examine the association between SES and age at menarche after adjusting for childhood body mass index (BMI) and other covariates associated with age at menarche. Results showed that change in SES was

significantly associated with age at menarche, a 20 unit decrease in SES was associated with a 4 month decrease in age at menarche".

Jane. M et al (2007) Determined "psychological outcomes associated with early pubertal timing in adolescent girls. Result show that review synthesizes the research on negative psychological sequelae of early pubertal timing in adolescent girls. Emphasis is on three theoretical perspectives by which precocious development is behaved to affect the emergence of adverse outcomes."

Braithwaite et.al. (2009).Investigated the variation in age at menarche by socioeconomic status (SES) and race. 1,091 black and 986 white girls were purposively selected. 9-10 years at baseline and followed through adolescence over a 10 - year period with annual exams. Using logistic regression models. Results revealed that proportionately more black girls were menarcheal before 12years of age compared to their white counterparts (46 % n = 240."

Shabnam. Omidvar and Khyrunnisa, Begum (2010) Assessed "hygienic behavior of unmarried females aged 15 to 22 years and factors affecting their behaviors. 350 students from educational institutions from South India were selected. The results showed that disposable pads were used by two-thirds of the selected girls (68.9%) regardless of age while 45.1% reported to use both disposable and non disposable materials. Frequency of changing pads was 2-3 times a day by 78.3% girls. Older girls had better hygienic practices than the younger ones. Seventy six percent of the participants desired for more information regarding menstruation and hygienic practices."

Subhash, B. Thakre et al (2011). Studied menstrual hygiene knowledge and practice among adolescent school girls of Saoner, Nagpur district. 387 school going girls of the 8th and 9th standards were purposively selected for the study. The results showed that 36.95% of the girls were aware of menstruation before menarche. Main source of information was their mother. ³/₄ girls were not aware of the causes and effects of menstruation. But had knowledge of sanitary pads. 45.74% were using old clothes. ³/₄ of the study girls practiced various restrictions during menstruation. The factors which were found to be most influential to affect menstrual behaviors were economic status and residential status."

Juyal.R et al (2012) Conducted "cross-sectional study in two randomly selected inter colleges (one rural and

one urban) of district Dehradun of Uttarakhand state. Sample size was 453. Results revealed that 64.5% girls (71.1% rural and urban 57%urban) were aware about menstruation prior to the attainment of menarche. Friends were the first information in about 31.8 % girls. Overall 38.4 % adolescent girls (48.1% rural and 27.6% urban) were using sanitary napkins as menstrual absorbent, while 30% were using a new cloth/rag every time."

K. Tamil and S. Ramachandran (2012) Conducted "study based on the primary data collected from 600 sample respondents from rural and urban areas chosen by using systematic sampling method. The sociocultural taboo index developed is to classify women into three categories as low, moderate and high practice of social taboos. The results showed that a very strong practice attitude among the women is clearly evident in keeping them away from religious and ceremonial participation. Surprisingly, this practice is comparatively high among urban respondents. Except religious and related taboos, women do not seem favorable to practice of other social-taboos."

Hugo et al (2012) analyzed "the relationship between socioeconomic status and age at menarche among indigenous and non-indigenous girls in the araucania region of Chile, controlling for nutritional status and mothers age at menarche. 8,624 randomly selected girls from 168 schools were screened. The analysis showed that no significant association between age at menarche and socioeconomic status. In the indigenous group, age at menarche among girls with low socioeconomic status was 5.4 months later than among those with higher socioecomic status. There were no differences in nutritional status according to socio economic level".

Adesuwa, F. A and Oliemen (2013) Examined "the relationship between age at menarche and anthropometric measurements among adolescent secondary school girls in Port Harcourt Nigeria. 479 adolescent girls were interviewed during menarche and their weights and height were measured. Result showed that three hundred and fifty (73.1%) of the subjects were post menarcheal while 129 (26.9%)premenarcheal. The mean age at menarche in adolescent secondary school girls in port Harcourt was 12.80±1.22 years. Anthropometric indices which were associated with a reduced menarcheal age were obesity, overweight and stunting."

Kamath. R et al (2013) explored "the knowledge, practices and sources of information regarding menstruation and hygiene among adolescent girls in Udupi taluk, India. 550 school-going adolescent girls aged 13-16 years. A total of 270 were from urban and 280 from the rural area. Stratified cluster sampling was used. The results revealed that around 34% participants were aware about menstruation prior to menarche, and mothers were the main source of information among both groups. Overall, 70.4% of adolescent girls were using sanitary napkins as menstrual absorbent, while 25.6% were using both cloth and sanitary napkins."

"Jawhara, A. A. (2014). Conducted a study to assess the knowledge, attitude and practice of the intermediate school female students regarding the biological changes occurring during puberty. A sample size of 542 students was selected randomly from female intermediate schools in Taif city. Results depicted that the median age for menarche was 13 years, 43.8% of the students in the sample scored below average level of knowledge, mother constituted the main source of information for the students. Mean while it was found that 38.9% had negative attitude towards the biological changes occurring during puberty."

Golam. H et al (2014) investigated "the effects of anthropometric measures and parents socio-demographic factors on age at menarche among secondary school girls in Rajshahi City, Bangladesh. The data was collected from 300 students. The results revealed that more than 68% school girls reached menarche in normal age (12-13years), and only 5.70% got menarche at early age (9-10years). Early menarche was especially found among the girls who came from high socio-economic status, having relatively high chest circumference and with both the parents working in government or non-government organizations."

Rupali. P and Sanjay (2014) Studied and compared "knowledge, attitude and practices of menstruation and menstrual hygiene in rural and urban adolescent girls. This was a community based cross-sectional study in rural and urban field of Nagpur on 310 adolescent girls of age group of 10-19 years from each area. The results depicted that awareness regarding menstruation was more in urban adolescent girls (63.38%) as compared to rural (47.57%). 62.03% of urban girls were using commercially available sanitary pads as compared to 43.4% of rural girls."

Richa.S (2014) Conducted "Impact of socio economic status on age at menarche. Multistage sampling technique was used. Age 10-19 years from grade 7-12 standards were purposively selected for the study. The result shows that the menarche ages ranged between 10 and 12 years for about 49 %, and between 13 and 14 years for 51 %. It was seen that a maximum number of girls experiencing an earlier onset of menarche (between 10-12 years) belonged to middle socio- economic stratum."

Jane.M et al (2015) Studied "puberty socioeconomic status and depression in girl's evidence for gene x environment interactions.630 female twin and sibling pairs from the national longitudinal study of adolescent health. Results showed that genetic predispositions toward later menarche were associated with fewer depressive symptoms and that genetic predispositions toward earlier menarche were association with more depressive symptoms. Lower socio economic family's showed the highest overall levels of depression."

V. CONCLUSION

There was no difference regarding attitudes between rural and urban participants. There is a need to provide education and equip them with skills regarding safe and hygienic practices and to make appropriate choices so as to enable them to lead a healthy reproductive life and prevent the risk for reproductive tract infections.

VI. REFERENCES

- [1]. Adesuwa, F. A. and Oliemen, peterside.(2013). Age at menarche and body mass index (BMI) among adolescent secondary school girls in Port Harcourt, Nigeria.IOSR Journal of Dental and Medical sciences, 3,5.41-46. Retrived from http://www.iosrjournals.org.
- [2]. Akbar, Pejhan. et. al. (2011). The relationship between menarche age and anthropometric indexes of girls in Sabzevar, Iran. World applied sciences journal, 14 (11), 1748-1753. Retrived from. http://citeseerx.ist.psu.edu/viewdoc/download?doi10.1.1.389.3947&rep=rep1&type=pdf.
- [3]. Braithwaite, D. et. al. (2009).Socioeconomic status in relation to early menarche among black

- and white girls. Cancer causes control, 20, 713-720. Doi:10.1001/s10552-008-9284-9.
- [4]. Golam, Hossain. et. al. (2014). Factors associated with age at menarche of secondary school girls in Rajshahi city, Bangladesh. Advances in sciences, 4(2), 88-93. Doi:10.5923/j.als.20140402.09.
- [5]. Hugo, Amigo.et. al. (2012). Socioeconomic status and age at menarche in indigenous and non-indigenous Chilean adolescents. Cad. Saude Publica, Riode Janeiro, 28 (5), 977-983. Retrived from http://www.ncbi.nlm.nih.gov/pubmed/22641520
- [6]. H. Tiwari. et. al. (2006). Knowledge attitudes and beliefs about menarche of adolescent girls in anand district Gujarat. Eastern mediterranean health journal, 12, 428-433.Retrived from http://applications.emro.who.int/emphj/1203_4/12_3-4_2006_428_433.pdf.
- [7]. Juyal, R. et. al. (2012).Practices of menstrual hygiene among adolescent girls in district of Uttarakhand.Indian journal of community health, 24, 2. 124-128. Retrived from http://www.iapsmupuk.org/journal/index.php/ijch/article/view/173.
- [8]. Jawhara, A. A. (2014). Saudi Intermediate school girl's knowledge, attitudes and practices of puberty in taif, Saudi Arabia.International journal of medical science and public health, 3, 2.196-202. Doi:10.5455/ijmsph.2013.021220131.
- [9]. Jane, Mendle. et. al. (2007). Detrimental psychological outcomes associated with early pubertal timing in adolescent girls. Dev Rev. Author manuscript, available in PMC, 27 (2), 151-171. Doi:10.1016/j.dr.2006.11.001.
- [10]. Jane, Mendle. et. al. (2015). Puberty, socioeconomic status, and depression in girls: evidence for gene x environment interactions. Clinical psychological science, 1-14, Doi:10.1177/2167702614563598.
- [11]. Kamath, R. et. al. (2013).A study on knowledge and practices regarding menstrual hygiene among rural and urban adolescent girls in Udupi Taluk, Manipal, India.Global journal of medicine and public health, 2, 4. 1-9. Retrived from http://www.gjmedph.org/uploads/02-vo2no4.pdf
- [12]. K. Tamil, Selvi. And S. Ramachandran. (2012). Socio-cultural Taboos concerning Menstruation:

- A Micro LevelStudy in the Cuddalore District of Tamil Nadu, India. International journal of scientific and research publications, 2, 8.1-7. Retrived from http://www.ijsrp.org/research-paper-0812.php?rp=po775.
- [13]. Lata, R. K. et. al. (2013). Pubertal changes in adolescent girls: a community based cross-sectional study. National journal of community medicine, 4, 4. 640-643. Retrived from http://www.njcmindia.org.
- [14]. Rupali, Patle. And Sanjay, Kubde. (2014). Comparative study on menstrual hygiene in rural and urban adolescent.International journal of medical science and public health, 3, 2.129-132. Doi:10.5455/ijmsph.2013.161020133.
- [15]. Richa, Saxena. et. al. (2014).Impact of socioeconomic status on age at menarche.International journal of multidisplinary approach.1, 1. 76-82. Retrived from
- [16]. https://scribd.com/mobile/document/226468504/i mpact-of-socio-economic-status-on-age-at-menarche
- [17]. Shabnam, Omidvar. And Khyrunnisa, Begum. (2010).Factors influencing hygienic practices during menses among girls from south India- A cross sectional study. International Journal of Collaborative Research on Internal Medicine and public health, 2, 12. 411-423. Retrived from http://www.iomeworld.com/ijcrimph/ijcrimph-vo2-n12-01-a.htm
- [18]. S. P. Singh. et. al. (2006).Knowledge assessment regarding puberty and menstruation among school adolescent girls of district Varanasi, U.P. IndianJ.Prev.Soc.Med, 37, 1& 2. 9-14. Retrived from http://medind.nic.in/ibl/t06/i1/iblt06i1pgg.pdf.
- [19]. Subhash, B. Thakre.et. al. (2011). Menstrual hygiene: knowledge and practice among adolescent school girls of Saoner, Nagpur District. Journal of clinical and diagnostic research, 5 (5). 1027-1033. Retrived from http://www.ircwash.org/sites/default/files/thakre-
- [20]. Tazeensaeed, Ali.et. al. (2006).Understanding of Puberty and related Health Problems among female adolescents in Karachi Pakistan.J pak med assoc, 56, 2. 68-72. Retrived

2011-menstrual.pdf.

- fromhttp://www.jpma.org.pk/pdfdownload/594.pd f.
- [21]. Tamarra, J. T. et. al. (2010).The impact of socioeconomic status across early life on age at menarche among a racially diverse population of girls.Ann epidemiol, 20 (11), 836-842. Doi:10.1016/j.annepidem.2010.08.006.