Introduction: Because of the physical changes at the time of puberty, children in the age group of 10 to 19 show more interest to know about sex and sexuality. With the thinking of what father and brother will think of me if I ask doubts about the changes, they bury their doubts inside themselves. They do not get answers about the changes in anatomy and sexuality. In such situations, they talk with other children in the same age group who are also facing the same situation. Most of them do experiments and land up with a worsened situation.

Because of the lack of correct knowledge about puberty, the adolescent boys may feel more anxiety, more tension, sometimes fear, nervousness, becomes restlessness and extremely stressed. It can lead to a situation that they won’t be able to manage the situation. In that case, they try drugs, drink and smoke. Ultimately this will leads to bullying, lying, drunk driving, rebellious behaviour, body issues and mental health issues. Other than these, they may feel physical symptoms like nausea, vomiting, headache, stomach ache etc.

Objective: In the present study an attempt was made to explore the need of providing awareness regarding pubertal changes among adolescent boys.

Methodology: The required information was obtained through secondary data sources, which were available on the public domain.

Discussion: There are lots of studies available on the internet regarding the awareness of girls about puberty, the changes associated with and how to deal with them effectively. But there are only a few studies available about the same topic for boys.

Conclusion: There is a great need of providing awareness regarding puberty to adolescent boys so that many adverse effects of lack of knowledge can be prevented.

Key Words: Puberty, Rebellious behaviour, Sexuality and stress
Sexuality education and curriculum
In India, for private schools, it is not compulsory to include sexuality education in the curriculum. Even nobody knows how many private schools are following a comprehensive syllabus. It is compulsory for the private schools that are following the Central Board of Secondary Education (CBSE) syllabus to add a portion of sex education in their syllabus but they are very few. Many of the private and public schools that are affiliated with State boards of secondary education have not included a single portion of sexuality education in their curriculum.

Census
In the year 2011, there was a Census. According to that adolescents contribute one-fifth of the population of the State. In Maharashtra itself, adolescents contribute 19 per cent of the total population.

Population Council in India says that India has 315 million children in the age group of 10-24 and they represent 30% of the country’s population. 50,848 youths were included in the study. It is found that neither fathers nor mothers were ready to talk on the topics like romantic relationships and reproductive processes with the boys. These kinds of issues were discussed only by the mothers with their daughters.

The attitudes and expectations of the current younger generation change day by day. There was a poll conducted by India Today magazine along with AC Nielsen-ORG-MARG which shows that one among the four women living in big cities of India between the age group of 18 and 30 had indulged in sex before marriage. It is revealed that the age of indulging in sex is also declined. 42% of the samples were indulged in sexual activity between the age of 19 to 21. The most interesting thing is, 25% of the adolescents in the age group of 15-18 were very keen to have sexual activity.

In the year 2006-2007, a youth survey was conducted by the International Institute of Population Sciences (IIPS) and the Population Council in Maharashtra. The samples were unmarried men and women who were in the age group of 15-24 years and married women and men in the age group of 15-29 years. They found that most of the women in both groups do not have any sexual knowledge. There also 18% of men and 3% of women have had indulged in sex before marriage. Compared to women, men have more access to information, but it was not the right source. The fact is, in this era also, women do not feel free to talk about sexuality. The results also show the fact that 33% of unmarried women were aware of the fact that they could get pregnant from their first sexual encounter as compared to 46% of men.

Reality
Today’s young generation are at high risk of conditions that affect their health because of their personal choices, how the environment influence and changes in their lifestyle including diseases. The other conditions include disorders from substance use, injuries results from road traffic accidents, attempted and successful suicides, infections that are transmitted sexually, teenage pregnancies and unplanned pregnancies, homelessness, violence and several others.

Even though we live in a fast-forwarding and fast-growing country, today also there are restrictions or hesitations for the elders in our society to have a casual or free discussion of the reproductive health issues with teenagers or even with their sons.

Elders in society believe that if they talk about sexuality with adolescents, they may get into sexual crimes. Because of this kind of thinking of the elders, teenagers or adolescents get very little or no knowledge about sexuality either from their parents or from school.

As a result of the hesitation of the parents to discuss sexual health and sexuality and the lack of incorporation of topics related to sexual health, adolescents never get any help from their parents as well as the education system in this regard. The most interesting thing is, many of the health centres are also of no use for this matter.

When adolescents do not get enough knowledge from their parents, school and health centres, with no choice left, they turn towards their friends, local books and media. We can say that not only in India, almost in all countries, this is the situation and the teenagers or adolescents pass through this crucial phase of their life without the help from where they are supposed to. So, they are at high risk of getting road traffic injuries, sexually transmitted infections and if the situation is not handled properly at the time, this can lead to much bigger health problems for them in their later life.

There are certain changes in the body of an adolescent or teenage boy which are unexpected and upsetting experiences for many. One of the most suitable examples for this is ejaculation. It is believed to be the most upsetting experience for an adolescent who does not have much knowledge regarding the changes that happens at the time of puberty or the adolescent period. Shipman conducted a research study on the psychodynamics of sex education. It is revealed that only 15% of the samples had some knowledge about ejaculation and understood the concept of ejaculation before its occurrence. Thus, lack of preparation can lead to negative experiences in their lives and sometimes it can be fatal also.

Sometimes the information passed to the adolescents or the information they got from the other sources may not be adequate or accurate with their own experiences and that will affect their emotional balance. It is just as such factors influence adolescent girls’ perceptions of the menarcheal experience. Most of the time; adolescents hesitate to ask questions or doubts regarding their reproductive or sexual
health problems to elders keeping in mind that what elders will think of them. Ultimately, this leads to self-treatment of their problems or approach persons who are not legally permitted to practice medicine.\textsuperscript{16}

There was a bulletin that provides information about how the parents and caretakers have to interact with the adolescents to enhance their positive development. Adolescents discover themselves when their intellectual growth transfers from concrete form to abstract thinking. They try to define what they are and their relationship with the world. At that time, they ask themselves these four questions:

- Who am I? (Related to their sexuality and social roles)
- Am I normal? (Do I fit in with a certain crowd?)
- Am I competent? (Am I good at something that is valued by peers and parents?)
- Am I lovable and loving? (Can someone besides Mom and Dad love me?)

At many times parents and relatives of the adolescents work together. They should understand that the answers to these questions are very important to them. Also, they have to give them a chance to explore them and to find themselves the answers to these questions.\textsuperscript{17}

**Research findings**

A research study was conducted at Nand Nagari, Delhi. The setting of the study was slums and the samples were adolescent boys and girls. The findings of the study show that the adolescents were unaware of sexuality or sexuality-related matters. Half of the study populations knew the fact that secondary sexual characters for boys are growing of moustache and beard. Only 16.8 per cent of the samples were aware of ejaculation at night and 12.9 per cent were aware of pubic hair (Graph 1). The study also included knowledge about the changes that happen in the body during puberty. Girls had more knowledge regarding pubertal changes than boys. Only 58 per cent of adolescents knew the fact that moustache and beard are the signals that indicate the initiation of puberty. There is 12 per cent of adolescents who knew that ejaculation at night and genital growth are also a part of pubertal changes. The remaining 88 per cent were not even aware that these changes had already happened in their body. Some adolescents don’t even know what pubic hair is. All these indicate that there is a need for mass education about puberty and the changes that happen in the body at the time of puberty for adolescents especially for boys.\textsuperscript{18}

Awareness regarding puberty changes in secondary school children was the name of the cross-sectional study which was conducted at Bagalkot, Karnataka. There were three objectives; to evaluate the awareness regarding puberty changes in both boys and girls, to find out the necessity of the subject of sex education in the curriculum and the final one was to find out the source of information of the respondents. The students from the 8th, 9th and 10th standards were selected for the study. There were a total of 502 students selected for the study. Out of that, 394 (78.49\%) were boys and 108 (21.51\%) were girls. Regarding secondary sex characters, 19.80\% of the boys and 9.25\% of the girls had correct knowledge. When 55.56\% of the girls discussed sex matters with their parents but instead of discussing sex matters with parents, 45.18\% of boys discussed it with their friends. 41.23\% of the students were in favour of including sex education from higher secondary school. Regarding the source of information, 51.52\% of the boys received it through television, whereas 40.74\% of girls got the information through television.\textsuperscript{19}

A study was conducted in the Glasgow area to assess the changes in body composition in adolescent boys. A total of 47 healthy students were selected and the body composition was studied at 10 and 13 years. 22 of the students had reached a total puberty rating (TPR) greater than 4 and the remaining students were below 4 when it was checked at the age of 13. It is also observed that between the age of 10 and 13, there are very fast and dynamic changes in the body composition happens.\textsuperscript{20}

A study that was focused on the knowledge of adolescent boys about the pubertal changes was conducted in Udupi District. The study was conducted in selected schools. It is found that in the pre-test, 73\% of the boys had average knowledge and only 22\% of boys had good knowledge. Then teaching was given to the children and good knowledge was increased to 86\%.\textsuperscript{21} (Table 1).

**CONCLUSION**

The important life event that happens in the adolescent period is the changes that happen in the body at the time of puberty. That includes physical, emotional and psychological changes. These changes are very important for their future development. Educating about the growth and development in the body is very important for adolescents that will help to reduce the tension and anxiety at certain times of development if they do not possess adequate knowledge regarding these changes. Also, it will enable them to take the right decision about sexuality for the current situation and even for their future life.

But unfortunately, neither the parents nor the education system in India doesn’t take any interest or initiative in educating adolescents. As a result, they seek the answer for their own and some get more or less correct answers and most are in middle. So unable to get cope up with the situation, they approach measures like drinking, smoking and drugs. Adolescents need guidance to channel the drive toward risk-taking behaviour into less dangerous and more constructive
pursuits. So there is a need to educate the adolescents about the normal physiological changes occurring during the adolescence phase to help them to cope up with the various changes occurring and help to identify themselves as an individual.

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Source of funding- Self.

Conflict of Interest – Nil.

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ANSWER THE FOLLOWING QUESTIONS.

1. Data collected from three regions only, whether it is sufficient to reach any conclusion?: Very few studies had conducted on the topic of pubertal changes among adolescent boys. There are many studies related to pubertal changes but most of the samples are girls. There are one or two studies that included both boys and girls. In my study, I have included only boys. That’s why only “boys” are mentioned in the title.
2. As mentioned in summary no discussion about any physical symptoms like nausea, headache were found or not is mentioned in observations: That review I have got from the literature review of a study. I have searched a lot to find out the details of that review but it says that the article related to that topic is removed from the internet.
3. Data statistics should be given: Recently I have added statistical data in the corrected one.
4. Arrange the references according to the journal’s instructions: Ok
Table 1: Frequency and percentage distribution of pre-test and post-test knowledge score regarding pubertal changes among adolescent boys.

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Pre-test score</th>
<th>Post-test score</th>
<th>t</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency (f)</td>
<td>Percentage (%)</td>
<td>Frequency (f)</td>
<td>Percentage (%)</td>
</tr>
<tr>
<td>Poor (0-10)</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Average (11-20)</td>
<td>73</td>
<td>73</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Good (21-30)</td>
<td>22</td>
<td>22</td>
<td>86</td>
<td>86</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
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**Figure 1**: Awareness of boys regarding ejaculation at night and pubic hair.