

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

As of 2000, Adolescents (10-19yrs age group) comprised more than 1.1 billion of the world's population – that is one in every five people on our planet. The Asian region comprises 712 million people in that age group. The largest number of adolescents resides in South and South – West Asia (45%) followed by East and North Asia (33.6%) (WHO, 2004).

In Nepal, adolescent population is approximately 5.4 million. This population is nearly one-fourth (23.6%) of the total population of the country (Country profile, 2005). The adolescent (10-19 yrs) girls population is 2,65,1302. The share of adolescent female and male population to the total male and female population is almost equal (23.3%) of the total female and 23.94% of the total male population is adolescents). Among adolescent girl between 10-14 years of age 49% are literate and between 15-19 years of age only 39% are literate (CBS, 2001).

Following the International Conference on Population and Development (ICPD, 1994), adolescent reproductive health has received enormous attention around the world. The ninth five year plan and the second long term health plan (1997- 2017) emphasized developing special programs for both population control and reproductive health including adolescent health. The national reproductive health strategy developed by the Ministry of Health (MoH) in 1998 identified adolescent health as a critical component of the integrated reproductive health package .To address adolescent health and development issues, a comprehensive “National Adolescent Health and Development Strategy” was developed and adopted by MoH in 2000 with the support of World Health Organization (WHO). Currently though the government sector, Family health division, National Health Education Information and Communication Center(NHEICC) and National Health Training Center(NHTC), Department of Health Service (DoHS), MoH have undertaken initiatives to address

adolescent health issues with the support of WHO and other partner agencies, Government of Nepal initiated the population education program through the Ministry of Education and Sports by incorporating the knowledge, skills and attitude related contents and practices under the adolescence, sex and reproductive health education into lower secondary level (6-10 grades) school curricula (MoHP, 2005).

All the adolescents age (10-19) experience profound physical changes, rapid growth and development, and sexual maturation, often about the same time as they begin developing new relationships and intimacy. For many young people, adolescence is the time when they have their first sexual experience. In addition, young people experience psychological and social changes as they develop attitudes, abstract and critical thinking skills, a heightened sense of self – awareness, responsibility and emotional independence, communication patterns, and behaviors related to interpersonal relationships (WHO, 1998b).

According to Gullotta (cited in Manny, 2001) puberty is one of the most important changes. During puberty, the young person goes from looking like a child to looking like an adult in a relatively short period. Due to the changes in their hormones, adolescents are unpredictable at times, especially in their moods, affect and interest. Young people also become very focused on their physical appearance at this time. The role and importance of friends also changes. Peers help each other obtain a sense of identity and are a resource that adolescents utilize when making decisions such as what activities to be involved with and what to wear.

Petersen (Cited in Manny, 2001) state that adolescents also undergo changes in their social relationships. Adolescents try to achieve more autonomy and responsibility, and this requires the family to adapt these needs in order to keep harmony in the family.

According to Beck, 2007 (as cited in Nasheeda, 2008) as adolescence is the period of onset of puberty to adulthood. During this, period children go through physical, cognitive and emotional changes. For this reason, it is very important for individuals to understand and be prepared for the phases of adolescence. During adolescence stage, the individual's body begins to grow rapidly, size and shape of the body

changes, causing some teenagers to feel uncomfortable in their body. In addition to physical growth, teenagers also experience hormone changes and sexual maturation. These changes leave them confused, vulnerable and egocentric. Research reveals that these pubertal changes affect adolescent's self image, mood and interaction with parents and peers.

Vulnerability of the young girls is further increased, as they are withdrawn from school because they lack financial resources to continue schooling, need to care younger siblings, help in the household works, generate income, have unsatisfactory performance in classes and early marriage etc. (Mohp,2005).

Adolescence girls are considered ritually impure during menstruation, prohibitions are placed on their contact with other people (including family members), and on the food they can consume. Her restricted socialization leaves her shy and unconfident. She is trapped in a cycle of dependency that is handed on from her natal family to her husband's family on her early marriage (UNICEF, 2006).

1.2 Statement of the problem

Physical growth and maturation during adolescence occur rapidly that the adolescents have difficulty in adjusting to changing body image creates feeling of confusion about changes in their bodies. Onset of puberty in girls begins two years earlier than in the boys. The secondary sex characteristics or physical changes like hair in body parts, breast enlargement, increase in height and weight, fat deposition in the hip and thighs, pimples in face etc. which is stressful to girls and needs proper guidance and support (Wong, 2004).

In the context of Nepal, physiological and psychological changes related to puberty are very secret affairs. Young girls are not allowed to talk about the bodily changes openly in our society. There is little research on girl's perceptions of menstruation and their views that affect their psychological and social development. Girls' psychological acceptance of menstruation is likely to be undermined when menarche arrives with prior explanation. Although girls may have seen their mothers in

seclusion observe menstrual taboos they often do not understand what is happening to them when they begin to bleed.

So, the following questions will be raised regarding the experience of pubertal changes and its adjustment among adolescent girls:

What are the experiences of adolescent girls related to pubertal changes?

What are the ways of adjustment to pubertal changes?

1.3 Objective of the study

General Objective

The aim of this study is to identify the experience of pubertal changes and its adjustment among the adolescent girls.

Specific Objective

-) To find out the experiences of pubertal changes among adolescence girls
-) To identify the adolescent girls' ways of adjustment to the pubertal changes.

1.4 Conceptual Framework

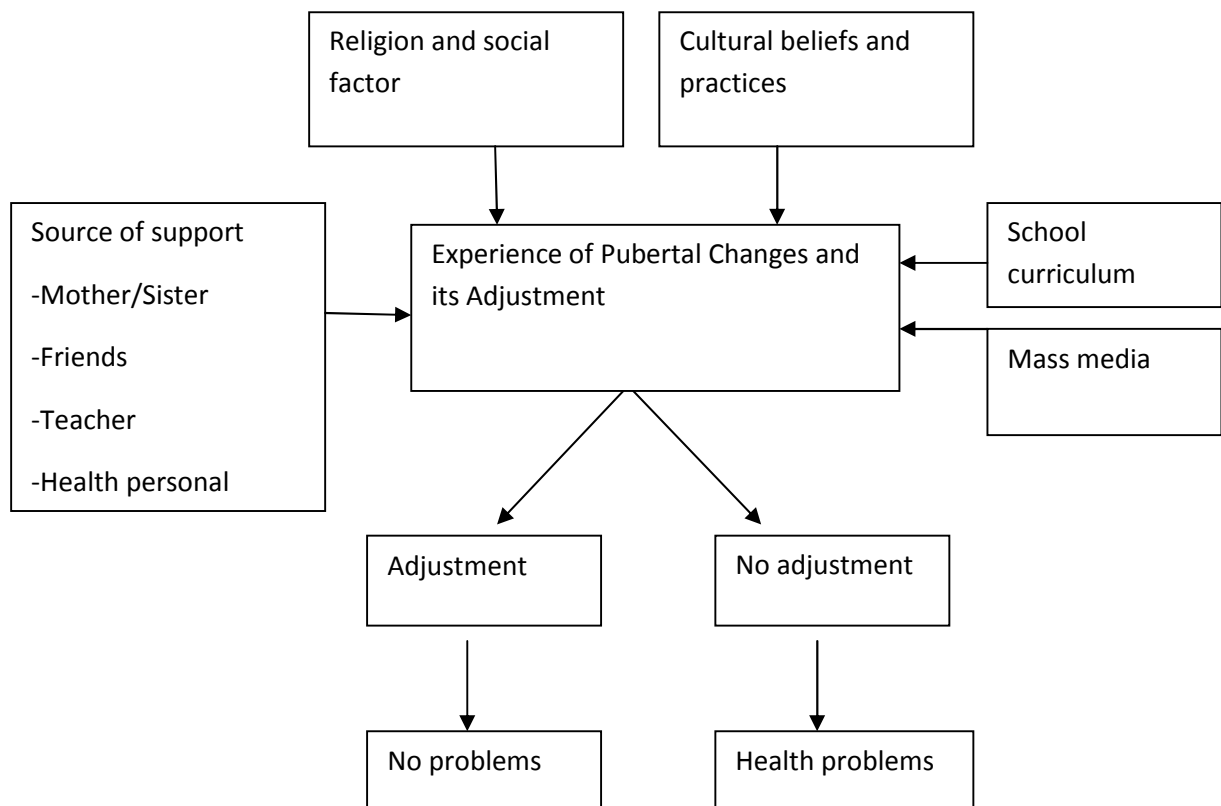


Figure1: Conceptual Framework on Experience of Pubertal Changes and its Adjustment among Adolescent Girls

The conceptual framework describes the phenomena of this research study. All the adolescent girls experience profound physiological and psychological changes during puberty that include physical changes, rapid growth and development, sexual maturation while developing new relationship and intimacy. Various factors such as religion and social factor, cultural beliefs and practices, school curriculum, source of support, mass media and availability of health services influence the experience of pubertal changes and its adjustment among adolescent girls. Adolescent girls' successful adjustment to pubertal changes leads to healthy life whereas problems in adjustment may lead to health problems.

1.5 Rationale of the study

In literature, it was found that puberty is more than a time of rapid physical development. It is a time of adjusting to a strange and unfamiliar body, of new relationships with members of the opposite sex and becoming aware of emerging intellectual powers. All the adolescents experience profound physical changes, rapid growth and development, and sexual maturation. Adolescence is the period of adjustment; they have to face different physical, social, emotional changes during puberty. A majority of girls experience sudden restrictions of freedom after menarche and are immediately prohibited from interacting with males, including family members. Many girls also miss school during their menstrual periods. Nepalese society does not allow a young teenager to ask questions about anything relating to sexual matters; so, any queries they may have regarding the changes that are occurring in them remain unanswered. In other words, our Nepalese teenagers are ill prepared for puberty. When pubescent children are not informed about or are psychologically unprepared for both the physical and the psychological changes that take place at puberty, then undergoing these changes may be a traumatic experience. Due to the changes in their hormones, adolescents are unpredictable at times, especially in their moods, affect and interest. Young people also become very focused on their physical appearance at this time. These changes leave them confused, vulnerable and egocentric; affect adolescent's self image, mood and interaction with parents and peers. Adolescent girls' successful adjustment to these pubertal changes leads to healthy life whereas problems in adjustment may lead to health problems.

This study will help the pre adolescents and adolescent girls to be familiar with the experiences that a girl undergoes during puberty and adolescence and their support systems. It will help them to be prepared for the changes physically and mentally. In addition, it will be helpful to parents, family, teachers, and health workers to understand the experiences of adolescent girls. They can help them for successful adjustment of pubertal changes by providing anticipatory guidance and counseling to the adolescent girls.

Menarche experiences can be useful to guide health care provider towards more effective education of girls on sexual and reproductive health issues and better

attention to women's needs. It will also help school teacher to provide ongoing education for young females and to encourage them to communicate with their support systems. Moreover, the findings of the study can be used as a source of reference in future study to the researcher and learner.

There is limited data on pubertal development of Nepalese girls. Moreover, very few researches have been done in:

The pubertal changes of adolescent girl.

How adolescent girl view their pubertal changes?

How they adjust with their bodily changes?

Who is supportive and helpful during these bodily changes?

More explorative studies are necessary to elicit the experiences of adolescent girls regarding their bodily changes during puberty and their ways of adjustment to these new changes. Therefore, the researcher intends to study the experience of pubertal changes and its adjustment among adolescent girls.

CHAPTER TWO

REVIEW OF LITERATURE

This chapter deals with the literature, which were reviewed throughout the program to support the problem under the study. The literature were collected from both electronic and non-electronic (internet, books, journals, reports etc) documents. The reviewed literatures are organized according to the objectives of the study.

2.1 Review of related literature

Girls experience puberty as a sequence of events, but their pubertal changes usually begin before boys of the same age. Each girl is different and may progress through these changes differently. Beginning of puberty: 8 to 13 years, first pubertal change: breast development, pubic hair development: shortly after breast development, hair under the arms: 12 years of age, menstrual periods: 10 to 16.5 years of age (www.avert.org/puberty-girls.html, retrieved on 10/8/2011).

According to Berk, 2007 (as cited in Nasheeda, 2007) adolescence is the period of onset of puberty to adulthood. During this period, child goes through physical, emotional and cognitive changes. For this reason, it is very important for individuals to understand and be prepared for the phases of adolescence. During the adolescence stage, the individuals body begins to grow rapidly, size and shape of the body changes, causing some teenagers to feel uncomfortable in their body. In addition to physical growth, teenagers also experience hormone changes and sexual maturation. These changes leave them confused, vulnerable and egocentric. Research reveals that these pubertal changes affect adolescent's self image, mood and interaction with parents and peers.

According to Petersen, 1988 (as cited in Al Cullen Manny, 2001) the functioning of the family is disrupted by the changes and needs of the adolescents as he or she develops. For instance, adolescents need more autonomy and responsibility as they go through adolescence, and this requires the family to readjust to achieve balance and

harmony in the family system. As a result, there is an increase in parent- adolescent conflict during early adolescence.

The study done among students' nurses in Birgunj Nursing campus, states that the majority of girls were unprepared for menstruation and was a frightening experience to them. The rituals observed during the period was that they were all kept isolated in a dark room, they were kept away from the parents preferably in neighbors' home, no sunlight, no male visitors which include their own father and or brothers, were not allowed to get out of room even for bowel/bladder evacuation. Majority of girls felt embarrassed, isolated and suffocating and very unhappy and sad. Reasons given for feeling unhappy and sad were increased parent's control; time for outdoor play was decreased, untouchable made them feel inhumane, afraid that parents would now get them married, missing school and how to face their classmates (especially boys), physical discomforts e.g. cramps, back pain etc. and changes in the body shape (Bhattacharya, 1999).

In Nepali culture, when a girl has her first menstruation, she is at once removed to a scheduled room where she is confined for 12 days. In these days of her confinement, she is not allowed to peep out, talk to others, especially the male members or touch food and water not meant for her. She cannot see her father, brothers and other male members during this period (Majupuria, 2007).

A national study in the United States has shown that the age at menarche has dropped from 12.75 years in the 1960s to 12.5 years in the 1990s and again to 12.3 years in the 2000s (Anderson & Must, 2005). According to Herdit and Ullrich(as cited in Mensch, Bruce and Greene, 1999) at the onset of menstruation, girls' lives often change abruptly, menstruating females in places as far apart as Papua New Guinea and South India are required to avoid contact with others.

Abdalla, Appfel-Marglin, Romero and Shweder (as cited in Mensch, Bruce and Greene, 1999) state that their activity may be restricted in many domains, including food preparation and consumption, socializing, religious practice, bathing, mobility, school attendance and sexual activity.

Caidwell, Reddy and Caldwell (as cited in Mensch, Bruce and Greene, 1999) South India study reported that one-half of girls who were in school at first menses were withdrawn at that time.” Usually to be married as soon as possible, either because menarche is taken as a sign that marriage should be arranged or because of the disgrace and danger of an unmarried pubescent girl being in public.”

Similarly, in rural Peru, the beliefs and taboos associated with the menstruation strongly encourage girls to remain at home during their menstrual periods. For girls, menarche signals that, like their mothers, they must assume greater responsibility for taking care of their younger siblings and their parents, as well as for doing household and farm chores. Many girls also miss school during their menstrual periods.(Chung, Straatman, Cordova, Reybaga,Burchfield and Kavanaugh,2001)

A review of literature on menarche and menstruation states that social and cultural factors influence adjustment to menses and have an effect on the early menarche experience. Certain common features, however, were observed in that most girls reported their mothers as a principal source of information and received some limited education about menses in school with frequent emphasis on hygienic aspects of menstruation. A more positive attitude toward menses can be achieved if girls are physically and emotionally prepared (Swenson & Havens, 1987).

Seventy- four 8th and 10th grade students attending a private girls’ school in Hawaii were queried about their perceptions of and preparation for menstruation using a questionnaire administered in a health education class. Eight percent had already started menstruating. Many were first informed menstruation by their mothers and stated that they also first informed their mothers when they stated menstruating. Surprise, fear and embarrassment were common initial reactions while strong negative or positive emotions were rare (Havens and Swenson, 1986).

The study done among Chinese girls states that participants’ mean age at menarche was 11.67 years. Their emotional reactions to menarche were largely negative, with almost 85% reporting feeling annoyed and embarrassed. In spite of these negative feelings, about two- thirds of the participants also reported feeling grown up and another 40% felt as if becoming more feminine (Tang, Yeung and Lee, 2003).

A Kathmandu based survey done among teenage students of two high schools on the problems they were facing due to changes caused by puberty and their knowledge about the normal puberty changes. Puberty is more than a time of rapid physical development. It is time of adjusting to a strange and unfamiliar body, of new relationships with member of opposite sex, and becoming aware of emerging intellectual powers. Interview studies have shown teenage years to be stressful. Nepalese society does not allow a young teenager to ask questions about anything relating to sexual matters; so, any quarry they may have regarding the changes that are occurring in them remains unanswered. In other words, our Nepalese teenagers are ill prepared for puberty. When pubescent children are not informed about or are psychologically unprepared for both the physical and the psychological changes that take place at puberty, then undergoing these changes may be traumatic experience. As a result, they are likely to develop unfavorable attitudes towards these changes-attitudes that are more apt to persist than disappear. The unhappiness caused by this may be reinforced to the point where it will become habitual and persist long after puberty has ended. Moreover, the conditions that contribute to unhappiness at puberty are likely to be persistent unless remedial steps are taken to change them (Sharma, 1999).

Several authors have noted that in comparison with Caucasian girls, African American girls receive maternal messages to be strong and self- reliant and are therefore less vulnerable to body image problems because these qualities lead to an enhanced sense of competence and independence. In order to develop positive body image, therefore, girls need family members who provide them with affirmation messages about their bodies and who posses positive attitudes towards their own appearance, weight and shape (Celio, Zabinski and Wilfley, 2002)

In Indian culture, it is not socially acceptable for parents to talk with children about sexually and reproductive changes. Parents, who could or should be the major source of information and preparation for the transition into adulthood, have largely been uninvolved with educating their children. In most cases, mothers do not even talk to their daughters about menstruation. To encourage parents to take on this role, there needs to be a focus on increasing awareness and strengthening the environment in menstruation as disgusting and as a curse (Gupta, 2003).

In one hundred and forty two Swiss girls of the first Zurich longitudinal study, the somatic pubertal development between 9 and 18 years is described. The peak of the pubertal growth spurt was reached at a mean age of 12.2 years (SD 1.0). The development of pubic hair started at a mean age of 10.4 years with SD 1.2, breast development at 10.9 years (SD 1.2) and the development of axillary hair at 12 years (SD 1.1). Menarche was noted at a mean age of 13.4 years (SD 1.1) (Largo and Prader, 1987).

UNFPA profile reveals that in India many adolescents' girls can go to extreme measures to remain within the weight, which they perceive to be ideal for them or the one, which will make them more attractive for the boys. They may go hungry, skip meals, adopt dieting programs or take up rigorous exercise schedule to remain thin or even adopt novel and potentially harmful practices like skipping meals, induce vomiting or smoking to support and encourage their anorexia. Government of Rajasthan's State plan, 1995 reveals that adolescent girls are also at higher risk of psychosocial stress because of gender discrimination (UNFPA, 2000). The study shows that the age of menarche among Indian girls, which is reported to be declining, ranges from 11.5- 14.5 years, with the current average age being 13.5 years (Bhatia, 1993).

CHAPTER THREE

RESEARCH METHODS

This chapter is concerned with the method used to find out the experience of pubertal changes and its adjustment among adolescent girls.

3.1 Rationale of selection of the Study area

Prabhat Higher Secondary School was selected for the study area because it is one of the government schools. No study was done previously in that school. Beside this, Government of Nepal initiated the population education program through the Ministry of Education and Sports by incorporating the knowledge, skills and attitude related contents and practices under the adolescence, sex and reproductive health education into lower secondary level (6-10 grades) school curricula. School is the best place for selecting post menarche girls and the very convenient place for data collection. Furthermore, collection of data was much easier for researcher at that area. So, the researcher selected the Prabhat Higher Secondary School to conduct study.

3.2 Research Design

In order to find out the experience of pubertal changes and its adjustment among adolescent girls, this study has been follow the descriptive design based on primary and secondary information.

3.3 Nature and Source of Data

The data has been both qualitative and quantitative in nature. Both primary and secondary data have been taken for this study. Primary data was collected from the respondents (post menarche adolescent girls studying in grade 8, 9 and 10) by researcher herself. Secondary data were taken from relevant literatures, library study, research reports, journals etc. Quantitative data was collected from the post menarche adolescent girls from the age group of 13 to 18 years who were studying in grade 8, 9 and 10 at Prabhat Higher Secondary School, Kathmandu.

3.4 Universe and Sampling:

All the post menarche adolescent girls were the universe of this study. There were 240 students studying in grade 8, 9 and 10. Among them, 137 were girls. By using purposive sampling technique, 122 post menarche adolescent girls, 30.32% from grade 8, 32.7% from grade 9 and 36.8% from grade 10 were taken for this study. Among all respondents, 103 boys, 6 girls who had not have menarche, 5 who were not present at the time of data collection and 4 who did not wish to participate in the study were excluded from the study.

3.5 Data Collection Technique

Verbal permission was taken from concerned government school before the study. The schedule for data collection was prepared according to the suitable time (lunch time i.e. 1pm). The post menarche adolescent girls of grade 8, 9 and 10 were kept in their respective classrooms. After introducing researcher, stated the objective of data collection and provided information on how to fill the self administered questionnaire (they were also told that they were free to ask in between questionnaire filling if any difficulty arises) to the respective classroom students. Informed verbal consent was taken from the respondents before data collection. The subjects were assured of the confidentiality of the information given by them. The subjects were told that they would be allowed to refuse to participate in the study at any time if they wished. Self-administered questionnaire was used to collect data.

A structured and semi structured, self- administered questionnaire was developed after reviewing the related literature to obtain the information regarding experience of pubertal changes and its adjustment. Questionnaire was divided into four parts. The first part of the research instrument included the socio-demographic information of subjects; the second part of instrument included the information related to physiological changes, the third part included the information related to psychological changes and the fourth part included the information related to adjustment to physiological and psychological changes.

Then the self administered questionnaire were distributed to the respondents and collected after filling the questions after completion. The respondents were thanked for their co-operation and providing time for data collection.

3.6 Reliability and Validity

The adequacy and accuracy of the content of the instrument was established by seeking opinion from the subject matter expertise, teachers, seniors and research advisor. Based on their suggestions, some modifications were done in order to make more comprehensible. Instrument was translated into Nepali language

The reliability of the instrument was established by pre testing the instrument on 10% adolescent girls from grade 9 and 10 studying in Tilingtar Higher Secondary School Kathmandu. This was similar but not the same setting. Based on the feedback of subjects, some modification on question was done to make it simple to understand.

3.7 Operational Definitions

Adolescent: Post menarche girl of grade VIII, IX and X.

Pubertal changes: In this study, pubertal changes include physiological and psychological changes.

Physiological changes: include physical and sexual development such as increase in height and weight, breast development, axillary and pubic hair growth, menstruation.

Psychosocial changes: include emotional and social changes.

Emotional changes: refers to Girls' positive and negative feelings related to experience of pubertal changes, feeling of happiness, frequent mood swings (sadness), fear related to bodily changes, feeling of discomfort and isolation.

Social changes: refers to girls' changed relationship with family, peers and outside world.

Experience: include the pubertal changes that the girls have had undergone and the girls' reaction to physiological changes and cultural rituals of menarche.

Adjustment: refers to the response of activities carried out to cope with the pubertal changes by adolescent girls.

3.8 Data Processing and Analysis

The collected data were checked and organized for completeness and consistency. The data were coded and entered into Statistical Package for Social Science (SPSS) version 16. Descriptive statistics; frequency, percentage, mean, and standard deviation of descriptive data are presented in table.

3.9 Limitation of the study

) The study was conducted after the approval of research proposal from Tri-Chandra Multiple Campus, taking formal permission from the concerned authorities, explaining the purpose of the study taking informed verbal consent from the respondent maintaining the privacy and confidentiality.

- The study area was limited in only one governmental school.
- The study was done for partial fulfillment of the requirements for the Master's Degree of Arts in Sociology.
- The sample size was 122, so, the study might not be generalizable.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

This chapter presents the findings of the study. The responses of 122 respondents have been analyzed according to the objectives and the research questions of this research study. Results are presented based on the descriptive analysis, which includes numbers, percentages, mean and standard deviation. The data were organized and presented in the tables in order to facilitate their interpretation. This was presented as follows:

4.1 Socio-demographic characteristics' of the respondents

It includes age wise distribution of the respondents, respondents' by ethnicity and respondents' by religion.

4.1.1 Age wise distribution of the respondents

Adolescence is considered to be the period between ages 10 and 19 years according to WHO. Adolescence is the period of transition between childhood to adulthood and Puberty starts usually between 9 and 13 years of age in girls, two years earlier than it does in boys.

TABLE 1
Age wise distribution of the respondents

n=122

| Age Group | Number | Percent |
|--------------------|---------------|----------------|
| 13-15years | 89 | 73.0 |
| 16-18 years | 33 | 27.0 |
| Mean Age | 15.04 | |
| Standard Deviation | 0.39 | |

Table 1 reveals that the age of the respondents varied from 13 to 18 years and majority of the respondents (73%) belonged to the 13-15years age group. The mean age was 15.04years and the standard deviation was 0.39.

4.1.2 Respondents' by ethnicity

Regarding ethnicity, various ethnic groups were present in this study such as Brahmin, chhetri, Newar, Rai, Tamang, B.K. etc. According to 2001 census, the total number of chhetri were 15.5%, Brahmin 12.5% and Newar 5.4%.

TABLE 2
Distribution of Respondents' by ethnicity

n=122

| Ethnicity | Number | Percent |
|------------------|---------------|----------------|
| Brahmin | 24 | 19.7 |
| Chhetri | 33 | 27.0 |
| Newar | 9 | 7.4 |
| Mangol | 23 | 18.9 |
| Others | 33 | 27.0 |

Table 2 shows the ethnic distribution that reveals 27% respondents were Chhetri, followed by 19.7% Brahmin and only 7.4% were Newar. As majority of Nepalese population consist of mainly Brahmin and Chhetri, the respondents of this study also reflects the same pattern. It might also be due to the residence of majority of such ethnic group on that area.

4.1.3 Respondents' by religion

TABLE 3
Distribution of the Respondents' by Religion

n=122

| Religion | Number | Percent |
|-----------------|---------------|----------------|
| Hindu | 88 | 72.1 |
| Buddhist | 21 | 17.2 |
| Christian | 13 | 10.7 |

Table 3 reveals that most of the respondents (72.1%) were Hindu whereas only 10.7% were Christian. As maximum population still follows the Hindu tradition, this has been also reflected in this study.

4.2 Respondents' experiences of physiological and psychological changes

4.2.1. Experience of Different Physiological Changes according to age

Literature shows that early puberty begins at 8 to 13 years, first pubertal change such as breast development, pubic hair development: shortly after breast development, hair under the arms occurs at 12 years of age, a menstrual period begins at 10 to 16.5 years of age. Similarly, the study done among Chinese girls states that participants' mean age at menarche was 11.67 years. Furthermore, in one hundred and forty two Swiss girls of Zurich in longitudinal study stated that somatic pubertal development between 9 and 18 years is described. The development of pubic hair started at a mean age of 10.4 years with SD 1.2, breast development at 10.9 years (SD 1.2) and the development of axillary hair at 12 years (SD 1.1). Menarche was noted at a mean age of 13.4 years (SD 1.1). The average onset of puberty is at 10 or 11 for girls and age 12 or 13 for boys. Every person's individual timetable for puberty is influenced primarily by heredity, although environmental factors, such as diet and exercise, also exert some influence.

TABLE 4**Age at which the Respondents Experienced Different Physiological Changes****n=122**

| Physiological changes | Age in Years | | | | | | | | | Total |
|------------------------------|---------------------|------|------|------|------|------|------|------|-----|--------------|
| | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 100% |
| Breast | 0.8 | 4.0 | 14.8 | 29.5 | 32.8 | 11.5 | 3.3 | 2.5 | 0.8 | 100% |
| Height | - | 10.5 | 18.4 | 32.8 | 21.1 | 10.7 | 4.1 | 0.8 | 1.6 | 100% |
| Pubic Hair | 0.8 | 4.1 | 9.0 | 21.3 | 24.6 | 26.2 | 9.8 | 2.5 | 1.6 | 100% |
| Weight | 0.8 | 4.1 | 11.5 | 25.4 | 27.9 | 20.5 | 7.4 | 0.8 | 1.6 | 100% |
| Axillary Hair | - | - | 10.7 | 9.8 | 26.2 | 28.7 | 18.0 | 5.7 | 0.8 | 100% |
| Pimples | - | - | 2.5 | 13.9 | 26.2 | 22.1 | 18.9 | 12.3 | 4.1 | 100% |
| Increased Secretions | - | - | 6.6 | 18.0 | 33.6 | 24.6 | 8.2 | 7.4 | 1.6 | 100% |
| Menarche | - | - | 6.6 | 21.3 | 38.5 | 22.1 | 8.2 | 3.3 | - | 100% |

Table 4 reveals that at the age of 13 years, maximum (32.8%) respondents experienced development of breast, 27.9% had rapid increase in weight, 26.2% had pimples in face, 33.6% had increase in vaginal secretion and 38.5% had menarche. Similarly, at the age of 12 years, maximum (32.8%) respondents had rapid increase in height. Furthermore, at the age of 14 years, maximum (26.2%) respondents had pubic hair and 28.7% had axillary hair growth.

4.2.2 Source of Information about Pubertal Changes

Information about Pubertal Changes can be obtained by different sources such as mass media, school, family member, teacher, health personnel etc. Literature on menarche and menstruation states that that most girls reported their mothers as a principal source of information and received some limited education about menses in school. Seventy- four 8th and 10th grade students attending a private girls' school in Hawaii were first informed about menstruation by their mothers and stated that they also first informed their mothers when they stated menstruating.

TABLE 5
Respondents Source of Information about Pubertal Changes

n=122

| Source | Number | Percent |
|-------------------|---------------|----------------|
| Mother | 78 | 63.9 |
| Sister | 17 | 13.9 |
| Friend | 10 | 8.2 |
| Mass media | 6 | 4.9 |
| School Curriculum | 8 | 6.6 |
| Health Personnel | 3 | 2.5 |
| Total | 122 | 100.0 |

Table 5 shows that regarding source of information, majority (63.9%) of respondents got information from mother and the least (2.5%) from the health personal about pubertal Changes. It might be due to mother plays a central role in grooming of every child. Beside this, she not only takes a complete care of children but also play a primary educator, providing basic education to each child (adolescence) and adolescence also feel comfortable and share every feeling to mother.

4.2.3 Reaction to the Physiological Changes

Adolescence is the period of development from pubescence to adulthood. Majority of girls felt embarrassed, isolated and suffocating and very unhappy and sad due to increased parent's control; decreased time for outdoor play, afraid that parents would now get them married, missing school and difficult to face their classmates (especially boys). Similarly, majority of girls had frightening experience during menarche.

TABLE 6**Respondents' Reaction to the Physiological Changes****n=122**

| Physiological Changes | Reaction (%) | | | | |
|------------------------------|---------------------|--|--------------|---------------|---------------|
| | Happy | Sad | Shy | Cried | Normal |
| Breast Development | 2.5 | 10.7 | 48.4 | 2.5 | 36.1 |
| Hair growth in body parts | 1.6 | 24.6 | 43.4 | 2.5 | 27.9 |
| Rapid changes in height | 54.1 | 7.4 | 6.6 | 0.8 | 31.1 |
| Rapid weight gain | 13.1 | 33.6 | 6.6 | 45.1 | 1.6 |
| Pimples on face | 5.7 | 11.5 | 23.8 | 33.6 | 25.4 |
| Increase vaginal secretion | 0.8 | 35.2 | 20.5 | 12.3 | 31.1 |
| | Very fearful | Took as a sin or curse from god | Cried | Normal | |
| Menarche | 72.1 | 5.7 | 12.4 | 9.8 | |

Table 6 shows that about half (48.4%) respondents felt shy to the breast development and (43.4%) to the hair growth in body parts. More than half of the respondents (54.1%) were happy to the rapid increased in height whereas 45.1% cried due to the rapid weight gain and 33.6% to the pimples on face, maximum (35.2%) felt sad to the increased vaginal secretions. Similarly, majorities of respondents (72.1%) were very fearful at the time of menarche. Though physical changes are normal phenomena, in Nepalese context, adolescence girls are not aware of those particular changes. That is why; most of the respondents were shy in breast development and hair growth in body part and even cried for rapid weight gain and pimples on face. Literature also supported that majority of girls felt embarrassed, isolated and suffocating and was very unhappy and sad.

4.2.4 Cultural Rituals during Menarche

In Nepali culture, during menstruation, the adolescent are kept under some restriction. A majority of girls experience sudden restrictions of freedom after menarche and are immediately prohibited from interacting with males, including family members. Many girls also miss school during their menstrual periods. The study conducted in rural Peru also revealed that adolescent girls were kept at home during menstrual periods. For girls, menarche signals that, like their mothers, they must assume greater responsibility for taking care of their younger siblings and their parents, as well as for doing household work. Many girls also miss school during their menstrual periods. Similar findings were presented in study conducted by Caidwell, Reddy and Caldwell (as cited in Mensch, Bruce and Greene, 1999).

TABLE 7
Respondents' Cultural Rituals during Menarche

n=122

| *Cultural Rituals | Number | Percent |
|---|---------------|----------------|
| Did not worship the god | 105 | 86.1 |
| Did not go to school | 87 | 71.3 |
| Taken as impure and dirty | 79 | 64.8 |
| Not allowed to see and talk to elder and male members | 67 | 54.9 |
| Did not cook and serve food | 60 | 49.2 |
| Kept in separate house | 52 | 41.6 |
| Did not sleep in bed | 22 | 18.0 |
| No cultural rituals | 13 | 10.7 |

Multiple responses*

Table 7 reveals that out of 122, 13 respondents do not have cultural rituals during menarche. Majority (86.1%) of respondents did not worship the god and the least (18.0%) did not sleep in bed during menarche. According to Hindu mythology, menstruation is taken as impurity. Females are not allowed to do the household work, worship god etc. the same findings were found in this study which was also supported by the literature which shows their activity may be restricted in many domains, including food preparation and consumption, socializing, religious practice, bathing, mobility, school attendance, and sexual activity.

4.2.4 Reaction to the Cultural Rituals of Menarche

Though menarche is also one of the normal physiological phenomena, adolescence girls are considered ritually impure during menstruation and prohibitions are placed in several domains this lead to them a traumatic experience. Her restricted socialization leaves her shy and unconfident in accordance with UNICEF, 2006. Their reactions to menarche were largely negative, with almost 85% reporting feeling annoyed and embarrassed.

TABLE 8
Respondents' Reaction to the Cultural Rituals of Menarche

| Reaction | Number | Percent |
|--|---------------|----------------|
| n=122 | | |
| Positive (n=37) | | |
| We need rest | 2 | 1.6 |
| Its Hindu tradition | 22 | 18.0 |
| We are allowed to do all things as usual | 13 | 10.7 |
| Negative (85) | | |
| Felt rejected | 64 | 52.5 |
| Not allowed to go to school | 19 | 15.6 |
| Feeling of discrimination | 2 | 1.6 |

Table 8 shows that majority 85(69.7%) had negative and least 37(30.3%) had positive reaction towards the cultural rituals of menstruation. The reasons for positive reaction given by 18% respondents belong to Hindu tradition whereas the reason for negative reaction given by majority 52.5% respondents was felt rejected. It is because Hindu culture puts lots of restriction especially during the period of menstruation. Adolescent have to go through all those limitations. That is why, majority of them felt rejected and are thought of being grown up and not allowed to go to school.

4.2.5 Experiences of Emotional Changes during Puberty

Puberty is one of the most important changes. The awareness of sexual differences between males and females increases at menarche. Gender roles, as dictated by society and culture often become intensified. Menarche is a time of mixed feelings. Girls start to care more about what other people think about them and want to be accepted and liked. Girls are anxious and scared, happy and embarrassed. However, changes in body image are common and girls are expected to act, and be treated differently after puberty. They seek independence from parental control and this is usually a source of tension within families (Jaiyesimi, A. K. 2011). During puberty, the young person goes from looking like a child to looking like an adult in a relatively short period. Due to the changes in their hormones, adolescents are unpredictable at times, especially in their moods, affect and interest. Due to rapid physiological changes taking place in an adolescent, a consciousness and increased interest about one's own body develops. The adolescent is exposed to new social situations, patterns of behavior and societal expectations which bring a sense of insecurity. It has been found that there is increase in the incidence of depression. An understanding of the psychological and physical changes that occur is necessary to prevent misinformation that can lead to all types of problems.

TABLE 9

Respondents' Experiences of Emotional Changes during Puberty

n=122

| Emotional Changes | Number | Percent |
|--|---------------|----------------|
| Curiosity about bodily changes | 94 | 77.0 |
| Like to sit alone in isolation | 57 | 46.7 |
| Like to be attractive | 53 | 43.5 |
| Fear of rejection by friends due to bodily changes | 39 | 31.9 |
| Increase attraction towards boys | 12 | 9.8 |

Multiple responses*

Table 9 reveals that all respondents had experienced emotional changes, majority (77.0%) of them had curiosity about bodily changes and the least (9.8%) had increased attraction towards boys. Nepalese society is still considered as male dominant. Female are not given equal opportunity in every areas as compared to male since the beginning. This prohibition might induce lots of curiosity regarding their bodily changes.

4.2.6 Experiences of Social Changes during Puberty

Puberty is a major milestone in young women's development and is the time when a girl becomes physically able to have babies. This transition is celebrated as an initiation into adulthood in certain cultures. The transition to "womanhood" plays a crucial part in a young girl's social life. Relationships with both parents and peers are affected. Girls seek to gain greater autonomy from their parents, and often, conflict increases and intensifies. When children go through puberty, there is often a significant increase in parent-child conflict and a less cohesive familial bond. Adolescents act older and want to be treated as adults, engaging in activities such as smoking cigarettes and drinking alcohol. Adolescence marks a rapid change in one's role within a family. They assume greater responsibility, increase household work (Chung, et al., 2001). During adolescence, Peer groups are especially important in the period of development. Peer pressure increases at this time. They associate with

friends of the opposite sex much more than in childhood and tend to identify with larger groups of peers based on shared characteristics. Susceptibility to peer pressure increases during early adolescence, peaks around age 14, and declines thereafter. The peer group influences the attitudes, values and behavior more than the child's own family.

TABLE 10
Respondents' Experiences of Social Changes during Puberty

n=122

| Social Changes | Number | Percent |
|--|---------------|----------------|
| Like to mix up and talk with peer groups | 103 | 84.5 |
| Household work has increased more than before | 91 | 74.6 |
| Parental restrictions has increased more than before | 53 | 43.5 |
| Conflict with parents | 46 | 37.7 |
| Taken as grown up and said no need to study further | 36 | 29.5 |

Multiple responses*

Table 10 reveals that all respondents had experienced social changes, majority 103 (84.5%) of them liked to mix up and talk with peer groups and the least 36 (29.5%) were taken as grown up and said no need to study further. Being a social member, there is a good social interaction among Nepalese people. So was found in this study as majority of adolescence got interaction with peer group. Peer groups can have positive influences on an individual, for instance on academic motivation and performance, but they can also have negative influences and lead to an increase in experimentation with drugs, drinking, vandalism, and stealing. Furthermore, their household work was more than before puberty thinking that they had entered into adulthood

4.2.7 Experiences of Problems related to Pubertal Changes

The physical and psychological characteristics of adolescents and the nature of developmental tasks which they are expected to perform often pose certain challenges

and problems for adjustment. Physical problems e.g. cramps, back pain etc. and changes in the body shape. Psychological problems are: Body image disturbances, pimples, eating disorders, moodiness, anger, hypersensitivity, crushes, infatuation, ay dreams etc. Similarly, Society Related problems are: Gender bias, caste related problems, generation gap, over expectations, lack of friends etc. The more serious problems include drug addiction, alcoholism, smoking, sexual obsessions, etc

TABLE 11

Respondents' Experiences of Problems related to Pubertal Changes

n=122

| Problems | Number | Percent |
|------------------------------------|---------------|----------------|
| Physical Problems(n=55) | | |
| Weakness | 34 | 61.8 |
| Menstrual problem | 17 | 30.9 |
| Overweight | 4 | 7.3 |
| Emotional Problems(n=66) | | |
| Difficulty in sharing the feelings | 39 | 59.1 |
| Persistent sadness without reason | 20 | 30.3 |
| Irritation and frustration | 1 | 1.5 |
| Dissatisfied with body shape | 6 | 9.1 |
| Social Problems(n=71) | | |
| Increased responsibilities | 28 | 39.4 |
| Decreased freedom | 37 | 52.1 |
| Gender discrimination | 6 | 8.4 |

Table 11 shows that, regarding the respondents' experience of physical problems, out of 55 respondents, majority (61.8%) had weakness. Similarly, 66 respondents had emotional problems, among them; majority (59.1%) had difficulty in sharing their feelings. Furthermore, 71 respondents had experienced problems related to social changes, among them majority (52.1%) had experienced decreased freedom. In our context, young girls are posed some kind of restriction for going outside, talking and sharing with other etc. This might have negative impact regarding experience of emotional and social changes as majority of them felt difficulty in sharing the feelings and decrease freedom respectively and it may leads the adolescent girls at higher risk of psychosocial stress.

4.3. Adjustment to physiological and psychological changes

4.3.1. Adjustments to the pubertal (Sexual) changes, pubertal (physical and emotional) changes

Puberty is a defining phase in a girl's life. Parents, especially mothers should talk to their daughters about pubertal changes and support them through this phase. These young girls should be encouraged to feel good about themselves and maintain good health. For adjustment, girls can go to extreme measures to remain within the weight, which they perceive to be ideal for them which will make them more attractive for the boys. They may go hungry, skip meals, adopt dieting programs or take up rigorous exercise schedule to remain thin or even adopt novel and potentially harmful practices like skipping meals, induce vomiting or smoking to support and encourage their anorexia.

TABLE 11a**Respondents' Adjustments to the Pubertal (Sexual) Changes****n=122**

| Sexual Changes | Adjustment | Number | Percent |
|-------------------------------------|----------------------------------|---------------|----------------|
| Breast development | Adopted hunched posture | 8 | 6.6 |
| | Used tight cloths | 32 | 26.2 |
| | Shared with friends | 15 | 12.3 |
| | Shared with mother | 56 | 45.9 |
| | Took it as normal | 11 | 9.0 |
| Hair Growth in Body Parts | Wore long sleeve clothes | 66 | 54.1 |
| | Share with mother | 31 | 25.4 |
| | Shared with friends | 3 | 2.5 |
| | Used hair removing cosmetics | 12 | 9.8 |
| | Took it as normal | 10 | 8.2 |
| Increased Vaginal Secretions | Share with mother | 36 | 29.5 |
| | Shared with elder sister | 1 | 0.8 |
| | Seeked health personnel's advice | 17 | 13.9 |
| | Took it as normal | 68 | 55.7 |
| Menarche | Share with mother | 93 | 76.2 |
| | Shared with elder sister | 3 | 2.5 |
| | Share with friend | 18 | 14.8 |
| | Seeked health personnel's advice | 2 | 1.6 |
| | Took it as normal | 6 | 4.9 |

Table 11a shows that nearly half of the respondents 45.9% and majority (76.2%) respondents' shared with mother for breast development and menarche respectively. Similarly, maximum (54.1 %) wore long sleeve clothes for hair growth in body parts. In addition, majority (55.7%) of respondents took increased vaginal secretions normally.

TABLE 11b**Respondents' Adjustments to the Pubertal (Physical and Emotional) Changes****n=122**

| Physical and Emotional Changes | Adjustment | Number | Percent |
|---------------------------------------|----------------------------------|---------------|----------------|
| Rapid weight gain | Shared with mother | 33 | 27.0 |
| | Did dieting | 31 | 25.4 |
| | Did exercise | 45 | 36.9 |
| | Took it as normal | 13 | 10.7 |
| Rapid Increase in Height | Shared with mother | 60 | 49.2 |
| | Did dieting | 16 | 13.1 |
| | Took it as normal | 46 | 37.7 |
| Pimples in face | Use cream and cosmetics | 36 | 29.5 |
| | Washed the face frequently | 30 | 24.6 |
| | Took it as normal | 21 | 17.2 |
| | Stay inside house | 18 | 14.8 |
| | Ate low fat diet | 17 | 13.9 |
| Emotional changes | Ate a lot | 41 | 33.6 |
| | Share with friend | 18 | 14.8 |
| | Seeked health personnel's advice | 2 | 1.6 |
| | Took it as normal | 6 | 4.9 |

Table 11b reveals that maximum (49.2%) respondents' way of adjustment to the rapid increase in weight was by sharing with mother. Further, 36.9% respondents' way of adjustment to the rapid increase in weight was by doing exercise. Likewise, 39.5% used cream and cosmetics to get rid of pimples. Moreover, maximum 33.6% respondents' way of adjustment to emotional changes was by eating a lot.

4.3.2 Adjustments to overall adjustments to problem related to pubertal Changes

TABLE 12

Respondents' Adjustments to Problem related to Pubertal Changes

n=122

| Problems | Adjustment | Number | Percent |
|---------------------------------|----------------------------------|---------------|----------------|
| Physical Problems (n=55) | Shared with mother | 40 | 72.7 |
| | Shared with friends | 9 | 16.4 |
| | Seeked health personnel's advice | 6 | 10.9 |
| Emotional Problems (66) | Shared with mother | 36 | 54.5 |
| | Shared with friends | 20 | 30.3 |
| | Used mass media | 7 | 10.6 |
| | Seeked health personnel's advice | 3 | 4.6 |
| Social Problems (71) | Shared with mother | 17 | 29.9 |
| | Shared with friends | 45 | 63.3 |
| | Shared with sister | 9 | 12.7 |

Table 12 reveals that majority (72.7%) of respondents shared with mother when they had physical problems. Similarly, for emotional problems, 34.5% respondents shared with mother. Furthermore, majority (63.3%) shared with friends for their problems related to social changes. During adolescent period, peer interactions occur regarding different social problem (e.g. family restriction, increased household responsibility) and they feel comfortable in sharing with friends. But in contrast, they share their physical and social problems with mother.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATION

5.1 Summary:

-) Majority of the respondents (73%) belonged to the 13-15years age group. The mean age was 15.04years and the standard deviation was 0.39. Most of the respondents were Chhetri, followed by Brahmin and Newar. Most of them (72.1%) were Hindu.

-) At the age of 13 years, maximum respondents experienced development of breast, rapid increase in weight, pimples in face, increase in vaginal secretion and menarche. Similarly, at the age of 12 years, they had rapid increase in height and at the age of 14 years, maximum respondents had pubic and axillary hair growth.

-) Regarding source of information, majority (63.9%) of respondents got information from mother and the least (2.5%) from the health personal about pubertal Changes.

-) About half of the respondents felt shy to the breast development and hair growth in body parts. More than half of the respondents (54.1%) were happy to the rapid increased in height whereas 45.1% cried due to the rapid weight gain and 33.6% to the pimples on face, maximum (35.2%) felt sad to the increased vaginal secretions. Similarly, majorities of respondents (72.1%) were very fearful at the time of menarche.

-) Regarding cultural rituals during menarche, majority (86.1%) of respondents did not worship the god, the least (18.0%) did not sleep in bed during menarche and 13 respondents do not have cultural rituals during menarche.

-) Majority 85(69.7%) had negative and least 37(30.3%) had positive reaction towards the cultural rituals of menstruation.

-) All respondents had experienced emotional changes; majority (77.0%) of them had curiosity about bodily changes.
-) All respondents had experienced social changes, majority 103 (84.5%) of them liked to mix up and talk with peer groups and the least 36 (29.5%) were taken as grown up and said no need to study further.
-) Regarding the respondents' experience of physical problems, out of 55 respondents, majority (61.8%) had weakness. Similarly, 66 respondents had emotional problems, among them; majority (59.1%) had difficulty in sharing their feelings. Furthermore, 71 respondents had experienced problems related to social changes, among them majority (52.1%) had experienced decreased freedom.
-) Maximum 45.9% and 76.2% respondents' shared with mother for breast development and menarche respectively. Similarly, respondents wore long sleeve clothes for hair growth in body parts. In addition, majority (55.7%) of respondents took increased vaginal secretions normally.
-) Maximum (36.9%) respondents' way of adjustment to rapid increase in weight was by doing exercise , in rapid increase in height was by sharing with mother (49.2%), Likewise, 39.5% used cream and cosmetics to get rid of pimples. adjustment to emotional changes was done by eating a lot.
-) Majority (72.7%) of respondents shared with mother when they had physical problems as well as emotional problems (34.5%). Furthermore, majority (63.3%) shared with friends for their problems related to social changes.

5.2 Conclusion:

The present study illustrates that the understanding of experience of girls' pubertal changes and its adjustment needs to consider various psychosocial and cultural factors. This study shows that majority girls had negative reaction toward the cultural rituals of menstruation, which may lead to adjustment problems in adolescence. An integrated menstrual education program should emphasize the affective components and positive information of menstruation. An understanding of girls' pubertal experiences is vital for their important developmental milestone.

Puberty is the development crisis for the adolescents but more stressful to girls due to the socio-cultural factor. They need proper preparation, guidance and support from family and school for effective adjustment to the new physiological and psychological changes. Monitoring of the physical growth and sexual maturity of adolescent girls must be considered as a routine task with necessary counseling to the pre-adolescent and adolescent girls along with their family.

Regular provision of educational sessions about pubertal changes should be initiated for young females in order to prepare them physically and mentally and to encourage them to communicate with their support systems. One of the best ways to prepare for girls, puberty and growing up is to educate young girls on the whole process they are going to face and provide information to help them understand that puberty is normal, and is just a part of growing up. They may feel like the changes they are going through are unique to them, but once they understand that their friends feel and are experiencing the same things; they will relax and accept the changes as perfectly as normal.

5.3 Recommendations

Future studies can be done including approximate timing of developmental changes in girls (physical and sexual growth).

Future research is needed to find out the adjustment problems in early and late pubertal developing girls.

Similarly, a study can be done taking more government and private schools for generalization of findings

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**TRIBHUVAN UNIVERSITY
TRI-CHANDRA MULTIPLE CAMPUS
GHANTAGHAR, KATHMANDU**

Self Administered Questionnaire

Part I

Socio-demographic Data

1. Age:.....
2. Class (grade):.....

Note: Please tick () the appropriate answer in the space provided.

3. Ethnicity:

Brahmin Chhetri Newar Other
(specify).....

4. Religion

Hindu Buddhist Christian Other
(specify).....

Part II

Questions Related to Pubertal Changes

5. At what age did you experience the following physiological changes?

Age in years

-) Rapid increase in height.....
-) Rapid weight gain.....
-) Hair growth in pubic area.....
-) Breast enlargement.....
-) Hair growth in axilla.....

- Excessive vaginal discharge.....
- Onset of menstruation.....
- Pimples on face.....

6. What is your source of information for pubertal changes?

- Mother Sister
- Friends Mass Media
- School curriculum Health professionals

Other (specify).....

7. What was your reaction toward the following bodily changes?

Note: You can choose one option.

| Bodily Changes | Happy | Shy | Sad | Cried | Normal |
|-----------------------------|--------------|------------|------------|--------------|---------------|
| Rapid increase in height | | | | | |
| Rapid weight gain | | | | | |
| Hair growth in body parts | | | | | |
| Breast enlargement | | | | | |
| Excessive vaginal discharge | | | | | |
| Pimples on face | | | | | |

8. What was your reaction towards the onset of menstruation?

- Very fearful
- Took as the sin or curse from the god
- Cried
- Other (specify):.....

9. What is your cultural practice during onset of menstruation?

Note: You have to choose () for yes or (X) for No answers from following options.

- You are in a separate room or neighbour's house.
- Not allowed to see and talk to male and elder family members.
-

Not allowed to worship the God and Goddess.

- You are taken as impure and dirty by your family and society.
- Not allowed to sleep in bed.
- Not allowed to cook and serve food.
- Not allowed to go to school.

10. What is your reaction towards the cultural practice of menstruation?

- Positive
- Negative

10.1 If it is positive, why (specify)?

.....

10.2 If it is negative, why?

- Felt rejected
- Not allowed to go to school

Other (specify):.....

11. Do you have problems related to physical changes?

- Yes
- No

11.1 If yes, what is the problem?

- Weakness
- Overweight
- Menstrual Problems (specify).....

Other (specify).....

11.2 With whom do you seek help for this problem?

- Mother
- Friends
- Health professional

Other (specify).....

12. Which emotional changes did you undergo during adolescence?

Note: You have to choose () for yes or (X) for No answers from following options.

- Like to attractive.
- Curiosity about bodily changes.
- Attraction toward boys.
- Insecure feeling toward the bodily changes.
- Like to sit alone in isolation

13. Do you have problems related to emotional changes?

- Yes
- No

13.1 If yes, what is the problem?

- Difficulty in expressing the problems
- Persistent sadness without reason
- Others (specify).....

13.2 With whom do you seek help for the problems?

- Mother
- Friends
- Mass media
- Health professionals
- Others (specify).....

14. Which social changes did you undergo during adolescence?

Note: You have to choose () for yes or (X) for No answers from following options.

- You are taken as an adult woman
- Your household work has increased more than before
- Like to mix up and talk with peer groups
- Have conflict with parents

You are said no need to study further
Others (specify).....

15. Do you have problems related to social changes?

Yes No

15.1 If yes, what is the problem?

Increased responsibility

Decreased freedom

Others (specify).....

16. Who was supportive and helpful during these changes?

Mother

Friends

Media (T.V., radio, newspaper, magazines, textbooks)

Teachers

Health professionals

Others (specify).....

Part III

Questions Related to Adjustment to Pubertal Changes

17. How did you adjust to rapid increase of height?

Took it as normal

Did dieting to control the growth of height

Shared your discomfort with mother

Others (specify).....

18. How did you adjust to rapid weight gain?

Did dieting

Did exercise to control weight gain

Shared your discomfort with mother

Others (specify).....

19. How did you adjust with the hair growth in body part?

- Wear long sleeve clothes
- Use cosmetics to remove unnecessary hairs
- Shared your discomfort with mother

Others (specify).....

20. How did you adjust with the breast (budding) enlargement?

- Maintained haunched posture
- Wear tight cloths to hide the changes
- Shared the discomfort with mother
- Shared the discomfort with friends

Others (specify).....

21. How did you adjust with the excessive vaginal discharge?

- Took it as normal
- Visit health professionals to treat the change
- Shared the discomfort with mother

Others (specify).....

22. How did you adjust with the pimples (acne) on face?

- Washed the face frequently
- Used the cosmetics to treat the change
- Did n't go outside the home

Others (specify).....

23. How did you adjust with the onset of menstruation?

- Shared the discomfort with mother

Shared the discomfort with friends

Visit health professionals to treat the change

Others (specify).....

24. How did you adjust with the emotional changes?

Eat a lot

Sleep a lot

Drink alcohol or abuse drugs

Others (specify).....

Thank you for your valuable time and information.