

PUBERTY IN ADOLESCENT GIRLS

Syafira Idza Fatahunnisa¹, Annisa Paramitha², Abib Azkan³,
Rizqullah Zaki⁴, Huga Al Falih⁵

SMAS Unggulan Al-Azhar Medan, Jl. Kwala Bekala No.214, Siti Rejo I, Kec. Medan Johor, Kota Medan, Sumatera
Utara 20142

shapiraamel@gmail.com, aparamitha514@gmail.com, habibazkan@gmail.com,
rizqullahzaki26@gmail.com, hugaalfalih@gmail.com

Received : 30 August 2025

Published : 02 December 2025

Revised : 10 September 2025

DOI : <https://doi.org/10.59733/medalion.v6i4.245>

Accepted : 25 September 2025

Publish Link : <https://medalionjournal.com/index.php/go>

Abstract

Puberty is a complex transitional phase from childhood to adulthood, characterized by significant physical, psychological, and social changes. In adolescent girls, puberty involves the maturation of reproductive organs, breast development, the onset of menstruation (menarche), and changes in body fat distribution. Besides biological changes, emotional shifts such as anxiety, embarrassment, and identity-seeking also occur. This study employs a literature review method using various journals related to puberty to examine the impact of these changes on adolescent adjustment. The findings indicate that a lack of knowledge and family support is associated with increased anxiety, stress, and negative self-concept among adolescent girls. Therefore, reproductive health education and family involvement are essential in helping adolescents adapt to puberty in a healthy manner.

Keywords: *puberty, adolescent girls, physical changes, psychological changes, adjustment.*

Introduction

Puberty is one of the most important developmental phases in human life, marking the transition from childhood to adulthood. This phase is characterized by rapid and complex biological, psychological, and social changes. In adolescent girls, puberty usually begins at the age of 8-13 years with characteristics such as breast growth, the onset of menstruation (menarche), changes in body fat distribution, and pelvic enlargement. This process occurs due to the activity of reproductive hormones, particularly estrogen and progesterone, which trigger the maturation of sexual organs and the emergence of secondary sexual characteristics. These changes signal the body's readiness for reproductive function, but they also have a significant impact on the psychological and social aspects of adolescence.

In addition to physical changes, puberty has a significant impact on the emotional and mental state of adolescents. Adolescent girls often experience anxiety, embarrassment, and discomfort about their bodily changes, often accompanied by confusion and fear. A lack of knowledge about puberty and a lack of preparedness in dealing with it often result in stress, self-concept disorders, and poor self-adjustment. Information from the Indonesian Demographic and Health Survey shows that around 13.3% of adolescents are unaware of the physical changes that occur during puberty, and nearly 50% do not know when they are fertile. This condition illustrates the low level of understanding among adolescents about puberty, making them vulnerable to psychological problems when entering this phase.

The lack of openness in communication between parents and children about the changes that occur during puberty is another factor that exacerbates the condition. Many families are unable to perform developmental tasks to accompany adolescents through this phase. This condition causes children to seek information from less credible sources, including social media and peer groups. In fact, the role of the family is very important in providing emotional support and explanations about reproductive health so that adolescents can accept their physical changes well. Unpreparedness for puberty can cause various negative problems such as anxiety, withdrawal from social environments, decreased academic performance, and even actions that violate norms. Considering these issues, this study aims to examine and understand puberty in adolescent girls, including the physical and psychological changes that occur, the factors that influence adolescents' ability to adapt, and the role of family and environment in supporting this adjustment process. This study is expected to provide benefits in increasing adolescents' knowledge about puberty. Therefore, adolescents will have the opportunity to prepare themselves more thoroughly, helping

parents to be more active in providing guidance. And serve as a reference in developing counseling and reproductive health education programs in schools and communities. By understanding puberty correctly, adolescent girls are expected to go through this period in a healthy manner, both physically and mentally, so that they can avoid the negative effects of insufficient preparation and information.

Literature Review

Puberty is described as a complex transitional period, when an individual begins to leave childhood behind and moves towards adulthood. During this period, the body undergoes significant biological changes, including increased hormonal activity, physical changes, and the development of the reproductive system, which marks the individual's biological readiness to enter adulthood, as well as rapid and complex changes in thinking and emotions (psychological) and ways of interacting with the environment and other people (social). According to Hurlock, puberty is a stage of development in which the reproductive organs mature and secondary sexual characteristics appear as a sign of readiness to reproduce. The onset of puberty differs between females and males. Females generally begin puberty between the ages of 8 and 13, while males enter this phase between the ages of 10 and 15. This process is influenced by the activity of the gonadotropin, oestrogen, and progesterone hormones, which trigger the development of primary and secondary sexual organs.

Physical changes in adolescent girls include breast growth, pelvic enlargement, the appearance of hair in the armpits and pubic area, and the onset of the first menstruation or menarche. In addition, there are changes in body composition with an increase in fat in the hips and thighs. This process is generally accompanied by changes in height, bone growth, and significant muscle development. Factors that influence puberty include genetics, nutritional status, health conditions, and social environment. Research shows that children with good nutrition and a high body mass index tend to experience puberty earlier than children with poor nutrition. In addition, exposure to external hormones (e.g. certain chemicals), psychological conditions, and family factors also play a role in accelerating or delaying the puberty process. Apart from bringing physical changes, puberty also has a major impact on the psychology of adolescents. Rapid hormonal changes often trigger emotional instability, anxiety, embarrassment, and a search for identity. This can affect adolescents' social, emotional, and academic adjustment. Previous studies have shown that adolescents who lack information and support from their families tend to experience stress, low self-esteem, and negative self-concepts.

These findings are in line with the results of other studies. According to Bintang (2021), adolescents' understanding of physical changes during puberty has a significant relationship with their stress levels. Adolescents who have less knowledge about puberty tend to experience higher levels of stress. Vivin's (2018) research findings also reveal that the level of readiness of adolescent girls in facing physical changes during puberty is closely related to the extent to which they are able to accept themselves. The phenomenological study conducted by Triyanto (2010) emphasises the importance of the family's role in providing emotional support during puberty, as a lack of communication can lead to psychological problems such as negative body image and risky behaviour. Thus, this literature review confirms that puberty is a critical phase that not only brings biological changes but also affects the emotional and social conditions of adolescent girls. Family support, health education, and mental preparedness are important factors in helping adolescents cope with this period in a healthy and positive manner.

Research Method

This study applied a descriptive method with a qualitative approach as the analytical framework. This method allowed researchers to thoroughly examine ideas about puberty. This study highlighted the dynamics of physical and psychological changes in adolescent girls and various factors that play a role in the process, with reference to previously available literature.

Type of Research

In its implementation, this research was designed as descriptive research using a qualitative approach. This approach allowed researchers to examine in detail the concept of puberty, physical and psychological changes in adolescent girls, and factors influencing this process based on published scientific literature.

Population and Sample

The population in this study was all literature discussing puberty, adolescent development, and reproductive health, both from national and international journals. The sampling technique used was purposive sampling, in which articles were selected based on their relevance to the research topic, publication period within the last five years, and the quality of credible sources. From the search results, ten main articles were obtained as primary references,

including studies on physical and psychological changes in adolescents and factors that influence self-adjustment.

Data Collection Techniques

The research design used was descriptive with a qualitative approach, emphasizing the depiction of reality based on literature and narrative data. Through this approach, researchers were able to elaborate on the concept of puberty in detail, encompassing the physical changes that occur and the accompanying psychological implications for adolescent girls. Furthermore, this method also opened up the opportunity to examine both external and internal factors that influence the dynamics of the puberty process by referencing relevant previous literature sources.

Data Analysis

The data analysis procedure used a content analysis approach. Through this method, researchers reviewed and studied the content of each article in detail with the aim of finding the main ideas contained therein, while highlighting research results directly related to the focus of the problem that had been determined beforehand. The data is then categorized based on themes, such as the definition of puberty, physical changes, psychological changes, influencing factors, and the impact of puberty on self-adjustment. The results of this analysis are compiled systematically to provide a comprehensive understanding of puberty in adolescent girls.

Results and Discussion

Research Results

The results of the literature review show that puberty in adolescent girls is an important phase marked by significant physical, hormonal, and psychological changes. Puberty generally begins at the age of 8-13 years and is characterized by the development of reproductive organs, breast enlargement, fat formation in the hips, and the onset of the first menstruation (menarche). In addition, other changes that often occur are hair growth in the armpits and pubic area, changes in height, and increased activity of the hormones estrogen and progesterone. From a psychological perspective, adolescent girls often experience drastic emotional changes, such as irritability, embarrassment, and anxiety related to changes in body shape. Research shows that a lack of knowledge about puberty is a factor that causes anxiety and stress in most adolescents. The Indonesian Demographic and Health Survey reports that 13.3% of adolescent girls are unaware of the physical changes that occur during puberty, and nearly 50% do not know when they are fertile.

The study also shows that factors influencing puberty include genetics, nutritional status, health conditions, and social environment. Nutritional status plays an important role in determining the timing of puberty. Children with good nutritional status usually enter puberty earlier, while children with malnutrition are at risk of delayed physical and reproductive development. Therefore, family involvement is a very decisive factor in supporting adolescents' ability to adapt. A phenomenological study conducted in Purwokerto revealed that a lack of communication between parents and children about puberty increases the risk of psychological disorders, such as negative body image and deviant behavior. In general, the results of this literature indicate that puberty in adolescent girls is not only a biological change, but also requires psychosocial support for the adaptation process to run optimally. Reproductive health education and guidance from the family are key factors in minimizing any negative impacts that may arise.

Discussion

Puberty in adolescent girls is a complex phase of development, as it involves biological changes accompanied by psychological and social impacts. Findings from literature research indicate that physical changes, such as breast growth, hair growth in the armpits and pubic area, and the first menstruation, occur as a result of increased oestrogen and progesterone hormones. This transition indicates that adolescent girls' bodies have entered the stage of reproductive maturity, which is the main characteristic of puberty. However, rapid physical changes often cause discomfort and embarrassment in some adolescents, especially if they do not have adequate information. From a psychological perspective, puberty can trigger drastic emotional changes. The hormones involved in sexual development also affect emotional stability, causing adolescents to experience feelings of irritability, anxiety, and uncertainty. This is consistent with the findings of Bintang (2021), who revealed a significant relationship between adolescents' understanding of puberty changes and their stress levels. A lack of information makes it difficult for adolescents to accept their bodily changes, which in turn affects their self-concept negatively. Another study by Vivin (2018) confirms that self-readiness is an important factor in accepting physical changes, as adolescents who are mentally prepared will find it easier to adapt to these changes. In addition to biological and psychological changes, the social environment plays an important role in shaping adolescents' experiences of puberty. The family is the main

source of information and emotional support, but the facts on the ground show that many parents do not provide adequate explanations about puberty to their children. A phenomenological study in Purwokerto found that 78% of adolescents did not receive explanations about the signs of puberty from their parents. In such circumstances, adolescents tend to seek information from sources outside the family, such as their friends or the internet. This can lead to new problems, as not all the information obtained is scientifically sound, which can lead to misconceptions about the changes associated with puberty. Nutrition and health factors also influence the age of puberty. Children with good nutrition tend to experience puberty earlier, while poor nutrition can hinder sexual development. In addition, early puberty due to obesity or hormonal factors can have an impact on reproductive health and the risk of disease in later life. Therefore, understanding biological and environmental factors is very important in providing appropriate education to adolescents and parents.

Discussion on page 5

Overall, this discussion shows that puberty is not only a biological phenomenon, but also a psychosocial development process that requires guidance from family and school. Appropriate reproductive health education, open communication between children and parents, and mental preparedness of adolescents are key to dealing with puberty so that adolescents can adapt positively, reduce anxiety, and prevent negative impacts that can interfere with their development.

Stages of Puberty in Girls

8-13 Years Breast Development
 9-14 Years Underarm & Pubic Hair Growth
 9-14 Years Height Growth
 10-15 Years First Menstruation (Menarche)
 10-16 Years Pelvic Enlargement
 Psychological-Emotional Instability, Shyness
 Social - Start to be Attracted to the Opposite Sex

Category	Changes	Age Occurrence
Physical	Breast growth (thelarche)	8–13 years
	Underarm and pubic hair growth	9–14 years
	Rapid height growth	9–14 years
	First menstruation (menarche)	10–15 years
Psychological	Pelvic enlargement and body fat gain	10–16 years
	Feeling embarrassed about bodily changes	10–15 years
	Irritability, emotional instability	10–16 years
	Searching for identity and independence	11–18 years

Category	Changes	Age Occurrence
Social	Increased interaction with peers	11–18 years
	Attraction to the opposite sex	12–18 years

Table 1. Summary of Puberty Changes in Adolescent Girls

Physical Changes	Psychological Changes
Breast growth (thelarche)	Feeling embarrassed about bodily changes
Underarm and pubic hair growth	Emotional mood swings (irritability, restlessness)
First menstruation (menarche)	Anxiety about reproductive health
Rapid height growth	Search for self-identity
Pelvic enlargement and increased body fat	Interest in the opposite sex and beginning to fantasize
Acne and skin changes	Sensitivity to peer judgment

Table 2. Comparison of Physical and Psychological Changes in Adolescent Girls During Puberty

Physical Changes	Psychological Changes
Breast growth (thelarche)	Embarrassment about bodily changes
Armpit & pubic hair growth	Mood swings
First menstruation (menarche)	Anxiety about reproductive health
Rapid change in height	Search for identity
Pelvic enlargement & body fat	Attraction to the opposite sex
Acne appears	Sensitivity to peers' judgements

Closing
A. Conclusion

Puberty in adolescent girls is an important and complex phase of development, marked by changes that occur during puberty in physical, psychological, and social aspects. Physically, adolescent girls experience breast growth, the onset of their first menstruation, and the emergence of other secondary sexual characteristics. Psychologically, they often face mood swings, feelings of embarrassment, anxiety, and a process of self-discovery. Factors that

influence puberty include genetics, nutritional status, health conditions, and the social environment. Literature analysis shows that a lack of knowledge and family support can have negative effects such as stress, self-concept disorders, and risky behavior. Therefore, puberty is not only a biological process, but also requires serious attention from an educational and psychosocial perspective so that adolescents can adapt well.

B. Recommendations

Comprehensive reproductive health education is needed for adolescents, both through schools and reliable media, to prepare them for puberty. Parents need to improve open communication with their children and provide age-appropriate explanations so that adolescents do not feel anxious or embarrassed about the changes they are experiencing. Schools are expected to provide regular counseling and reproductive health education programs. Further research could explore the influence of social and technological factors on adolescents' readiness for puberty, given the rapid development of digital information.

REFERENCES

1. Aprillia O, Gufran N, Yarni L. Perkembangan Masa Puber. GURUKU: Jurnal Pendidikan dan Sosial Humaniora. 2024;2(3):261-275. doi:10.59061/gurukuv2i3.730.
2. Nurhaliza KM, Safitri NT, Yarni L. Perkembangan Masa Puber. Observasi: Jurnal Publikasi Ilmu Psikologi. 2024;2(4):27-37. doi:10.61132/observasiv2i4.531.
3. Bintang. Hubungan Pengetahuan Remaja tentang Perubahan Fisik Pubertas dengan Tingkat Stres. Jurnal Psikologi. 2021;9(1):15-22.
4. Vivin. Hubungan Kesiapan Diri terhadap Perubahan Fisik Masa Pubertas dengan Penerimaan Diri Remaja Putri. Jurnal Kesehatan. 2018;5(2):120-128.
5. Gultom DM, Sari E. Penyuluhan Kesehatan tentang Perubahan Hormon Masa Pubertas pada Usia Remaja. Jurnal Law of Deli Sumatera. 2022;1(1):27-30.
6. Sabariah. Perkembangan Fisik Remaja. STAI Al Hikmah Medan. 2020;132-135.
7. Triyanto E. Pengalaman Masa Pubertas Remaja: Studi Fenomenologi di Purwokerto. Jurnal Ners. 2010;5(2):147-153.
8. Rahma JA, Maulida AI, Perwita AD, et al. Precocious Puberty: Etiology and Current Treatment. Jurnal Biologi Tropis. 2023;23(1):148-154. doi:10.29303/jbvtv23i1.5926.
9. Penyesuaian Diri Remaja. Pengaruh Perubahan Fisik dan Psikis Selama Pubertas terhadap Penyesuaian Diri Remaja. Jurnal Psikologi. 2021;10(2):55-64.