# Perspective of Adolescents Regarding Need of Adolescent Health Services; A Mixed Method Study in Rawalpindi, Pakistan

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# **Abstract**

Adolescence is a transitional period of physical and mental development that develops between childhood and adulthood. This change includes biological, social, and psychological changes. The study has tried to establish the need for adolescent health services in Pakistan. The study was designed to determine perspective of adolescents regarding need of Adolescents health services and to advocate students, parents and peers about the needs of adolescents. The study has theoretical and practical significance. A Mixed method study was conducted at the Department of Public Health, Armed Forces Post Graduate Medical Institute, National University Medical Sciences Rawalpindi from March 2022 to May 2022 by combining quantitative and qualitative research method. The data collection and analysis has followed the survey research type protocol and descriptive research methodology. Students of 1st year and 2nd year were the study population. The sample size was 380 and the duration of study was based on 2 months. Simple Random Sampling technique was used in Quantitative research method, while the focus group discussion was done with 8-10 participants. The quantitative data collection

was done through closed ended questionnaire and qualitative data collection was done through open ended structured interview guide. The quantitative data was analysed statistically on SPSS and qualitative data was analysed through thematic content analysis. This study has found that regarding the knowledge about puberty and bodily changes, there were mixed opinions of the participants and adolescents have no standardized prior knowledge of bodily changes and personal hygiene to a satisfactory level. It was found that their source of guidance, was internet, friends and their close circles which is ambiguous to some extent. The study found that adolescents do not face severe anxiety or depression and other emotional complexities but they face frustration and hindrance because of lack of background knowledge. It was also found that the participants were inclined to share their experiences with their mothers, friends, relatives and their sisters. It found that the majority of the participants have not smoked or run away from home. The study also found that there is a need of adolescent health services in Pakistan.

Keywords: adolescent health services, Rawalpindi

# Introduction

Adolescence is a transitional period of physical and mental development that develops between childhood and adulthood. This change includes biological, social, and psychological changes [1]. Historically, the definition of adolescence has been based solely on age classification. However, a study [2] argues that the definition of adolescence is a fluid classification process. To demonstrate this fluidity, the United Nations defines youth as 15 to 24 years old, teen as 15 to 19 years old and young adult as 20 to 24 years old [3].

A study states: "Adolescence is not determined by age and health, but by the gender distribution, roles, responsibilities, and relationships that govern men and women" [4].

Adolescent research needs to highlight the various factors influencing identity development beyond physical development. For example, where young Italians in Italy feel unfamiliar and alienated from their country's national ideology, young people in Central Europe (Bratislava, Slovakia) are more involved in political life. For the study of youth in these countries, it is useful to understand the social structure of unemployment, homelessness and drug addiction [5].

Mental illness and suicide are now recognized as global health problems for young people. About 20% of the world's 1.2 billion young people suffer from mental illness. Adolescent suicide is one of the leading causes of death in developed countries. Evidence indicates that approximately 20% of adolescents suffer from depression and stress-related problems each year [6].

According to a study on the history and needs of adolescent health, in recent years, less attention has been paid to the health and needs of adolescents compared to children and even adults. Children and teens commit crimes for a variety of reasons, mostly social [7].

This study is helpful to evaluate the perceptions of adolescents regarding presence of adolescent health services in the community. This study may be helpful to highlight the problems faced by adolescents in discussing and provision of health care needs. As surveys and studies regarding this subject are quite limited in third world countries, there remains a dire need for such a study.

The aim of this study is to promote the adolescent health, to determine perspective of Pakistani adolescent girls and boys regarding need of adolescent health services, and to advocate students, parents and peers about the needs of adolescents.

# Materials and Methodology

### Design:

A Mixed method study was conducted from March 2022 to May 2022 by combining both quantitative and qualitative research method. The study was conducted in the following two institutes located in Rawalpindi, Pakistan: Global College System for Boys; Islamabad College of Management and Commerce (ICMC), for girls. This study has followed descriptive research methodology.

#### Inclusion criteria:

Students of 1st and 2nd year have been included in our study.

### **Exclusion criteria:**

Students other than 1st and 2nd year have been excluded from our study.

#### Sample size calculation:

The current study followed simple random sampling technique. At a 5% margin of error, 95% level of confidence, 50% response distribution, and population size of 20,000, the recommended sample size obtained was 377 as calculated by Raosoft sample size calculator (Raosoft, Inc., Seattle, WA). However, we kept the sample size of our study at 380. The following formulae has been used by the software where the sample size n and margin of error E are given by:

$$x=Z(^{c}/_{100})^{2}r(100-r)$$
  
 $n=^{N}x/_{((N-1)E}^{2}+x)$ 

$$E=Sqrt[(^{N-n)x}/_{n(N-1)}]$$

Where population size is represented by N, fraction of responses represented by r, and Z(c/100) representing the critical value for the confidence level c.

#### Data collection:

Simple Random Sampling technique was used in Quantitative research method, while focused group discussion was done with 8-10 participants for qualitative sampling. The total duration of study was 2 months. For collection of quantitative data, a validated questionnaire (having 10 questions) was used, while an interview guide was used for qualitative data collection. The qualitative data was collected through semi-structured open ended interview guide which was collected from two focus groups. One focus group was based on 8 girls and the other was based on 8 boys.

### **Statistical Analysis:**

SPSS version 23.0 (IBM Corp., Armonk, NY), was used for evaluating quantitative and qualitative data. Numerical variables were described using mean and +/- standard deviations. Categorical variables were presented in frequencies and percentages. Paired-Samples T-Tests were performed where a higher t-score indicates that a large difference exists between the two sample sets and smaller t-score means more similarity exists between the two sample sets. The collected qualitative data was analysed through thematic analysis. The details about themes and sub-themes are given in the supplementary file.

#### **Ethical Consideration:**

Permission was acquired from the Department of Public Health, Armed Forces Post Graduate Medical Institute, National University Medical Sciences Rawalpindi where the study was conducted. The data was collected after obtaining informed consent. It was ensured that the confidentiality of the participants was maintained.

### **Informed Consent:**

Written consent was taken from the participants regarding aims and objectives of the study. It was ensured that all the participants understood the information given. The informed consent and questionnaire took 10-15 minutes to complete. The participants were given the choice to withdraw from the study at any point. Incomplete responses were excluded from the final analysis.

# Results

The demographical details of the participants is shown in Table 1 which shows that the number of girls and boys in our study were equal in number. Around half the participants were of 17-18 years of age. Our study consisted of identical number of participants from each year of study.

The majority of the participants responded with "sometimes" when they were asked about their overall happiness; getting along with their families; having at least one adult they can talk to; if they were satisfied with their height and weight; if they missed more than 7 days of school the previous year; and if they use different ways to lose weight. A substantial number of the participants included did not run away from their homes and have not been a part of a gang. A big majority of them felt safe in their home, school and community. The number of participants who thought that their grades got worse than they used to be and who think otherwise were of almost equal number as shown in Table 2.

Table 1. Demographical details of the participants

		Frequency - n (%)
Gender	Boys	190 (50)
	Girls	190 (50)
Age	Below 16 years old	48 (12.6)
	17-18 years old	188 (49.5)
	19 years old	144 (37.9)
Year of study	1st year	190 (50)
	2 <sup>nd</sup> year	190 (50)

Table 2. Response of the participants to the questions asked

Question asked	Response – n		
	Yes	Sometimes	No
In general, are you happy with the things that are going for you?	98	217	65
Do you get along with your family?	86	225	69
Do you have at least one adultyou can really talkto?	127	205	48
Do you feel safe at home, at school and at your community?	143	128	109
Do you thinkyou are about the right weight and height?	112	177	91
Have you missed more than 7 days of school in the last year?	34	197	149
Are your grades worse than they used to be?	137	104	139
Have you ever run away from home?	45	31	304
Have you ever been in a gang (now or in the past)?	48	144	188
Do you ever skip meals, use laxatives or diet pills, or throw up on purpose to lose weight or to control your weight?	98	217	65

### **Knowledge about Puberty and Bodily Changes:**

Regarding this perspective, there were mixed opinion of the participants, few of the participants were of the view that they had knowledge about puberty and bodily changes and few had a contrary opinion.

### Participant 11 claimed:

"I had no prior knowledge about the bodily changes and puberty until I started experiencing it."

# P3 claimed:

"It was total on novel experience to me. I had heard nothing about such things before and it was quite something unbelievable to me. To some extent these rapid bodily changes gave me a sort of anxiety"

On the other hand, few of the participants were of the view that they had a bit of Knowledge about puberty and bodily changes. P8 claimed:

"I had an idea about puberty and bodily changes but I believe it wasn't sufficient enough to deal with the changes I started experiencing."

Then there were very few of the participants who believe that they had sufficient knowledge about puberty and bodily changes.

### **Knowledge of Personal Hygiene:**

In regards to knowledge of Personal Hygiene, again there was mixed opinion. Most of the participants were of the view that they had no standardize knowledge about Personal Hygiene and fewer were of the view that they had insufficient knowledge and there were only one or two participants who believed that they had sufficient knowledge.

#### P7 claimed:

"I had no prior knowledge of Personal Hygiene but after I reached to the age of puberty and adolescent, I got guidance from different sources."

#### P4 claimed:

"I had a bit of prior knowledge about Personal Hygiene before I entered in the era of Adolescent"

### Source of Guidance/Knowledge:

Regarding the source of guidance, participants had mixed views. The majority of the participants were of the view that they gain guidance and knowledge from their mothers, a few of the participants were of the view that they gained knowledge from their friends or sisters and cousins, aunties and a few of the participants claimed that they gain knowledge from the Internet and from various sites.

### A participant claimed:

"My mother and aunt guided me"

#### P12 claimed:

"My mother was my source of guidance and she guided me even before I reached the age of puberty. She guided me about the adolescent age and related changes and the bodily changes and she also guided me how to conduct Personal Hygiene and related things."

#### P8 claimed:

"No one was there to guide me so I gained all the knowledge from the Internet."

#### P6 claimed:

"My whole knowledge is based on the Internet and YouTube."

#### **Internet and Websites:**

It was found that internet has a decent role and a significant influence on the lives of adolescents. Almost all of the participants were of the view that they have access to the internet and they use internet on regular basis. Regarding different websites or favourite websites there were mixed reviews; a few of the participants claimed that they like You Tube, two were in the favour of Whatsapp and a few favoured Instagram and a few of them favoured Google.

#### P4 claimed:

"I spend most of my time on YouTube and Google."

### P13 was of the view that:

"Whatsapp is my favourite application and I spend my time over there having fun with my friends, cousins and social circle."

### P7 shared thoughts:

"Instagram, obviously Instagram is a source of knowledge, source of entertainment and most favourite app of youth"

#### P1 was of the view that:

"Google because it helped me in studying my subjects along with that it aids me in gaining knowledge."

#### **Mental Health Issues**

It was found that the majority of the participants had no mental related issues or psychological problems but they were having concerns regarding the puberty and the physical changes and the experience and the lack of knowledge and guidance in the society.

### P14 claimed:

I cannot say that I had depression because you know depression is a strong feeling but yes I had faced problems while I was experiencing the physical changes and gradually the problems went away with the proper guidance I received from my mother and from my aunt.

## P6 was of the view that:

Ah I was having stress, i still feel stress on certain issues related to my bodily changes and my physical beings but I guess I cannot say that I was having strong sort of depression or some other severe issues.

# P8 shared thoughts that:

Lack of guidance sometime frustrates me

### **Sharing Issues with Others**

In terms of sharing the stress or other psychological issues and adolescent concerns it was found that the participants were inclined to share their experiences with their mothers, friends, relatives and their sisters.

#### P15 shared:

I share each and everything with my mother no matter what is the problem.

#### P16 claimed:

I share my issues with my best friend.

### P7 was of the view:

I share my problems stress and issues with my elder sister

### **Smoking Experience**

The majority of the participants claimed that they had never smoked.

#### P8 claimed that:

I have never smoked in my life.

### **Opinion about Adolescent Health Services**

Almost all of the participants claimed that there is a need for adolescent health services in Pakistan.

#### P 10 claimed that:

I am in huge favour of such services. There is dire need of such services in Pakistan.

#### P1 claimed that

Right now, there is lack of any proper channel and standardized services to guide the adolescents about puberty and bodily changes and this lack of services is creating so many problems for adolescents.

#### P2 was of the view that:

I can say from my experiences that adolescence is one of the most significant phases of someone's life and it is very much important to have proper guidance to deal with the bodily changes someone is going to experience and right now there are more such services in Pakistan. I believe in West, they have proper channels and they have proper guidelines but in our country there are no such services and this is creating so much psychological chaos among the adolescents and I believe that there be a proper channel and there should be some adolescent health related services.

# Discussion

Around the globe, adolescence is considered a period of opportunity and danger. This provides a window of opportunity, as steps can be taken during this period to prepare for healthy adulthood and reduce the likelihood of complications in future years, and develop and practice healthy eating habits and on the other hand this is a dangerous time, when serious immediate health consequences can and do occur (such as road traffic injuries, sexually transmitted infections, and unintended pregnancies from unprotected sex); this is when difficult behaviours (such as smoking and drinking) begin with serious side effects [8].

In the USA, adolescents are considered a diverse group. For example, a 12-year-old boy is at a very different stage of personal development than an 18-year-old boy. People who grow up in loving and financially secure homes can grow and develop better. Even two boys of the same age who are raised in the same environment, in different ways and at different times can grow and develop differently. This has been found by some studies [9].

This study is in line with most of the available literature like another study [10]. This study has found that regarding knowledge about puberty and bodily changes, there were mixed opinion of the participants; few of the participants were of the view that they had knowledge about puberty and bodily changes and a few had a contrary opinion.

The study has confirmed the findings of Berwick et al. which claimed that adolescents have no standardized knowledge about Personal Hygiene to satisfactory level. In terms of source of knowledge [11], the study has supported the findings of another study [12], as his study was of the view that regarding the source of guidance, adolescents are guided by the internet, friends and their close circles.

The finding of our study is contrary to the findings of Alizay et al. whose findings revealed that a lot of adolescents started facing various emotional and psychological problems and anxiety at the very initial stage of their adolesence [13]. In terms of sharing the stress or other psychological issues and adolescent concerns it was found that the participants were inclined to share their experiences with their mothers, friends, relatives and their sisters and this finding of the study was supported by previous studies like [14].

Our study also contradicted the findings of John et al., who has stated that majority of the adolescents smoke in Pakistan [15]. Moreover, the finding of the study confirmed the findings of Pallant et al. [16] that there is a need of adolescent health services in Pakistan.

### Conclusion

Unsurprisingly, one of the main factors influencing adolescent health behaviours is whether health-seeking behaviours get them into trouble with their parents or guardians.

Some of the barriers that young people face in accessing health services include emergency pregnancy and safe abortion. They cannot get medical care as healthcare facilities may be far from their life/studies/work or health care is too expensive and out of reach. Finally, health services may be "friendly" to some young people, such as wealthy families, but are not "friendly" to others, such as young people who live and work on the streets. In other words, it may be available, accessible and acceptable, but it is not necessarily neutral.

# Practical implications

Our findings have many practical implications for adolescent healthcare.

Information is primarily required for marketing and publicity efforts, with emphasis on service objectives, specific activities, areas of consultation, service practices and privacy policies. It aims to increase awareness and understanding of these services and remove barriers to public perceptions of youth health services that address only or primarily sexual issues. It is important to pass this information on to teens and parents.

Thoughtful and strategic decisions about promoting or dropping gender issues are key to marketing and delivery efforts. Schools can be potential starting points for disseminating information and building relationships between youth, parents, and service agencies. Efforts to promote youth access to health care, familiarity with these health care concepts, and a sense of 'normal' and comfort during visits are also important, by definition. It is especially important to work actively with women's underrepresentation, women's health, masculinity and youth health services to identify interventions for boys and young people. Parental awareness, acceptance, and participation in adolescent health services has the potential to increase adolescent acceptance, thereby increasing their access to these services.

Therefore, youth health services must be accessible not only to young people, but also to those who support them. This requires engaging young people and their support networks and allowing them to influence their health care. Youth health services in Pakistan were found to increase access, convenience, and motivation for young people by promoting competence, caring,

and respectful quality of staff, as well as providing appropriate behavioural arrangements; and attempting to provide a positive experience for young people.

# **Study Limitations**

First of all, for the participants' convenience where possible, they were not explicitly asked if they had visited a secondary healthcare provider before, but based on general or personal experiences according to their preferences. Therefore, it is important to note that in some cases participants' stories may be based on assumptions rather than life experiences. However, during the discussion, most participants chose to speak publicly about accessing these services.

Secondly, using schools and youth organizations established to recruit, participants must know each other before joining. Predetermined groups of people may have internal social dynamics that facilitate or hinder the participation of members of different groups in discussions. Influential members can move the conversation forward, helping to create a non-representative graph of ideas in the group. Although qualitative research does not require representation or simplification like qualitative research, the usefulness of qualitative research is widely discussed. Detailed search sequences and sample descriptions are recommended to facilitate use of the results in other contexts.

One potential limitation is movement or fear of expression when sharing personal experiences or speaking against others, which may prevent participants from expressing opinions and ideas. On the other hand, sharing as a group can create a sense of security when sharing with others, especially those they are familiar with. In addition, focus groups may be preferred for individual interviews when examining behaviours and practices between people, as was the case in the current study.

### Future study recommendation

In practice, it is advisable to provide adequate opportunities for timely entry and reservation. However, more research is needed to reach agreement on the best solution for youth health services and the possibility of separating girls from boys. As a final note, it is important to ensure respectful and supportive behaviour of staff in all activities and interventions, as this is an important aspect of youth health services, according to the participants in this study.

### References

- 1. Abuosi, A., 2021. Social Health Insurance and Quality of Care in Ghana's Hospitals. Bulletin of the World Health Organization, 10(3), pp. 20-21.
- 2. Waddington, C., & Sambo, C., 2021. Financing health care for adolescents: a necessary part of universal health coverage. Bulletin of the World Health Organization, 93(1), pp. 13-13.
- 3. UNICEF, 2021. Global standards for quality health-care services for adolescents: a guide to implement a standards-driven approach to improve the quality of health care services for adolescents.. Volume 2, pp. 10-11.
- 4. Slife, B. D. &. W. R. N., 2021. What's behind the research?: Discovering hidden assumptions in the behavioral sciences. Sage, III(3), pp. 10-21.
- 5. Samargia, L. A. S. E. M. & E. B. A., 2020. Foregone mental health care and selfreported access barriers among adolescents. The Journal of School Nursing, I(45), pp. 40-53.
- 6. Mitchell, P. H. F. S. & J. B. M., 2021. Quality health outcomes model. Journal of Nursing Scholarship, IV(34), pp. 48-54.
- 7. Enuameh, Y. N. O. E. M. E. T. C. B. E. S. A. &. Z. C., 2021. Family Planning Needs of Adolescents in Predominantly Rural Communities. .Open Journal of Preventive Medicine, IX(23), pp. 47-54.
- 8. Campbell, S. M. R. M. O. & B. S. A., 2021. Defining quality of care. Social Science Medicine, IV(7), pp. 1611-1625.
- 9. Biddlecom, A. E. S. S. &. M. A., 2021. Adolescents' views of and preferences for sexual and reproductive health services. original research article. Journal of Reproductive Health, vI(4), pp. 45-63.
- 10. Boamah, 2021. Quality in healthcare: concepts and practice. VI(6), pp. 10-12.
- 11. Berwick, D. M. &. K. M. G., 2021. Theory and practice for measuring health care quality. Health Care Financing Review, VI(3), pp. 28-36.
- 12. Mngadi, P. T. F. E. Z. I. T. H. B. &. R., 2021. Health providers' perceptions of adolescent sexual and reproductive health care in Swaziland. International Nursing Review, VII(82), pp. 43-53.
- 13. Alizay, 2019. Improving the quality of health care services for adolescents, globally: A standards-driven approach. Journal of Adolescent Health, VI(3), pp. 12-15. 14. Tufail, Jamni, Zahin, & Kamal . 2021.
- 15. John, 2020. The definition of quality and approaches to its assessment. V(3), p. 19.
- 16. Pallant, J., 2021. SPSS survival manual: A step by step guide to using SPSS for windows (version 23). New South Wales, Australia: Allen & Unwin., VIX(35), pp. 39-53.