

Awareness of Reproductive Health Among Adolescent and Young Adult Females; A Comparative Study in Urban and Rural Areas

Sana Latif¹, Syeda Mayedah², Naheed Bano³

¹WMO, Govt. Health Dispensary Ahmedabad, Rawalpindi, ²WMO, BHU Susral, Tehsil Gujar Khan, District Rawalpindi. ³ Assistant Professor, Gynae & Obs Unit 1 Holy Family Hospital, Rawalpindi

Correspondence: Dr. Sana Latif

WMO Govt. Health Dispensary Ahmedabad, Rawalpindi.

doctor.sana.latif@gmail.com

Abstract

Objective: To compare the knowledge of adolescent and young adult females of rural and urban areas regarding reproductive health.

Study Design: Descriptive Cross-Sectional study.

Place And Duration Of Study: Rural and urban areas of District Rawalpindi, from 30th April 2018 to 20th May 2018.

Methodology: A population-based survey was carried out using a self-administered structured questionnaire among 120 girls, 60 each from rural and urban area by systematic random sampling.

Results: Adolescents and young adults do have some knowledge about sexual and reproductive health and issues pertaining to them. Surprisingly, rural respondents are more knowledgeable about reproductive physiology (R= 51%; U= 31%), sexually transmitted infections (R=41%; U=30%), the utilization of health services (R=50%; U=20%) and also for the doctors and health staff workers are the main source of information about sexual and reproductive health (R= 41%; U=3% statistically significant), rural prefer government setup, while urban prefer private hospital/clinics. (R=54%; U=17% statistically significant) Both urban and rural groups had some good awareness about menstruation and its hygiene. Yet, a large majority needs clarification on their concepts and perceptions regarding reproductive health overall.

Conclusion: Healthy adolescence, the need of the hour.

In the present study, poor knowledge about reproductive health in both groups is the main concern right now. Although, they believe that having sound knowledge about this matter will promote mother and child health and eventually family health. Involving families and communities will enhance the effectiveness of youth programs.

Keywords : Reproductive health, Menstruation, Awareness, Youth, Female, Adolescents.

Cite this article as: Latif S, Mayedah S, Bano N. Awareness of Reproductive Health Among Adolescent and Young Adult Females; A Comparative Study in Urban and Rural Areas J. Soc. Obstet. Gynaecol. Pak. 2018; Vol 8(4):243-248.

Introduction

“No longer a child, not yet a woman”, is a line which captures the ethos of adolescence beautifully. This is a time of transition from childhood to becoming responsible adults. The changes are not only physical

and sexual, but also emotional and mental. We, as health care providers, need to focus on these young people as investing in their health today will reap rich rewards tomorrow. WHO defines Adolescence as 10-

Authorship Contribution: ¹analysis and interpretation of data, drafting and revision of manuscript, ²review methodology, drafting of manuscript, ²participated in the acquisition and data analysis, ³critical review of manuscript.

Funding Source: none

Received: Aug 02, 2018

Conflict of Interest: none

Accepted: Dec 30, 2018

19 years old, 'Youth' as 15- 24 years old and 'Young People' as 10-24 years old. The adolescence has been divided into two phases: 'early' (10-14 years) and 'late' (15-19 years).^{1,6}

Reproductive health is a state of complete physical, mental and social well-being and not merely absence of disease or infirmity in all matters relating to reproductive system and its functions and process.² It, therefore, implies that people are able to have a responsible, satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so.⁴

"Healthy adolescence, the need of the hour".

World interest in adolescent health issues has grown dramatically, beginning with the International Year of Youth in 1985 and the World Health Assembly in 1989, where discussions were focussed on the health of youth.³ In last 10 years, the importance of information on sexuality and reproduction is being increasingly emphasized. Reproductive health encompasses all aspects of adolescent health. It consists of several distinctive yet related issues such as sex education; reproductive tract infections prevention; abortions; childbirth; contraception; cancer screening and maternal mortality. The effects of globalization, rising age of marriage, rapid urbanization and greater opportunities for socialization have heightened the risk of STIs, H.I.V. and unwanted the pregnancy. While adolescents have unmet needs for information on reproductive health and services, these are not addressed by parents, schools or the existing health care systems. Sex education should be a lifelong learning process based on the acquisition of knowledge and skills and development of positive values and attitude.⁵

Menstrual hygiene is another important issue that every female has to deal with in her life. There is lack of information on the process of menstruation, the physical and psychological changes associated with puberty and proper requirements for managing menstruation. The taboos surrounding this issue in the society prevents females from articulating their needs and the problems of poor menstrual hygiene have been ignored or misunderstood. Good menstrual hygiene is crucial for the health, education, and dignity of girls and women as it is an important risk factor for RTI. This is an important sanitation

issue which has long been in the closet and there was a long-standing need to openly discuss it.

Hence, there is an urgent need to intervene in early adolescent period by imparting knowledge on reproductive health. The girl child, the women of tomorrow is a nation's asset. Give her an opportunity to develop as her development is the development of nation. To conclude, awareness regarding reproductive health during adolescence and youth will go a long way in improving health of future mothers and building an effective and sustainable nation.⁶

Methodology

A Descriptive Cross-sectional study was carried out in rural and urban areas of district Rawalpindi, via systematic random sampling of adolescent and young adult unmarried girls. Girls were assessed in terms of socioeconomic features, Knowledge regarding various sexual and reproductive health (SRH) matters and issues was assessed by simply exploring whether the respondents had ever heard or discussed them. The list included themes such as bodily changes during puberty, relationships, the onset of menstrual cycles and the importance of hygiene maintenance particularly washing and re-use of cloth if not using a sanitary pad. HIV/AIDS and other sexually transmitted infections, their signs/symptoms, treatment, and prevention. Physiology of male and female reproduction, particularly pregnancy and how it is conceived.

Confidentiality and anonymity was assured to all the interviewees. After explaining the purpose of study an informed verbal as well as written consent was taken from the respondents. None of the respondents refused the interview. Afterward, a self-administered structured questionnaire, created using help from the WHO questionnaire pattern,⁷ was distributed for data collection.

SPSS version 10 was used for data entry and data management, whereas Epi info version 7 and Epi data version 3.1 was used for analysis. In addition to field data editing, random checks and logical cleaning was done. Beside Simple frequencies, Pearson's Chi-square test was applied and P values were calculated at 95% confidence interval to look for any significant variations between the two categories.

Results

The questionnaire was filled out by 60 urban and 60 rural females. The mean age of urban and rural respondents were 18 years and 19 years respectively. Most of them were students and belonged to upper-middle and lower-middle class.

Regarding the source of information on sexual and reproductive physiology, urban females would prefer mother (35%) and friends (28%) in the first place. Sisters and mother are 18% and 16% respectively, as the source of information in rural area. Doctors and health center staff (LHVs and midwives) are usually consulted particularly by 41% of the rural girls as compared to 3% in urban category, (*statistically significant* in both areas $\chi^2=19.59$, $p= <.001$). The almost equal number of the respondents preferred Films and videos/TV (around 10%) in both the populations, whereas very few agreed on receiving information on SRH by their teacher (3%) in a rural setting as compared to an urban setting (12%). Books/Magazines and Newspapers could be another source of information (<1%) on SRH. (Table I).

Source of Information	Urban (n=60)	Rural (n=60)	χ^2	P. Value
Mother	35%	16%	3.903	0.048
Sister	13%	18%	0.474	0.491
Friends	28%	10%	5.261	0.020
School Teacher	12%	3%	2.778	0.096
Doctor/ Health Care Staff	3%	41%	19.59	<0.001
Film/TV/ Videos	9%	10%	0.091	0.763

The adolescents were asked to assess the accuracy of two statements on reproductive physiology, namely, that a woman can become pregnant at first intercourse and that pregnancy is most likely to occur in midcycle. Almost half of the rural respondents (51%) said yes to the first statement but only 20% had confidence in the accuracy of the second statement. An urban response was relatively poor, only 31% affirmed that there is a chance of pregnancy to occur after first intercourse and even lesser (18%) knew that there is a high chance of pregnancy halfway between two menstrual cycles.

Special attention was given to matters pertaining to menstruation and menstrual hygiene. In the present study, the mean age of menarche was 12 years and 14 years for urban and rural respectively. 60% of

urban and 48% of rural area girls had prior knowledge on menstruation (before attaining it). Number of rural girls (65%) knew about uterus as an organ for menstrual blood, as compared to urban (58%). This shows that majority of the girls, whether urban or rural, have some good know-how on menstruation. Majority of the urban respondents use only sanitary pad (60%) as absorbent during menstruation, whereas in rural areas majority uses both cloth and a sanitary pad (63%). Very few girls use either sanitary pad only (18% in rural) or cloth only (18% in rural and 8% in urban), as an absorbent.

Regarding hygiene, out of 81% cloth users in rural group 18% wash and re-use, whereas, out of 40% cloth users in urban group, 25% wash and re-use. Since the number of cloth users in urban is less, the percentage of girls who wash and re-use is more. Almost 60% of rural and 33% urban respondents take a bath once or twice during menstruation, whereas 61% of urban girls follow restrictions and do not take a bath at all as compared to 30% rural respondents.

Hand washing is practiced by 46% of urban and 36% of rural, both before and after changing the sanitary pad/cloth, whereas 53% urban and 58% rural wash their hands only after the changing of sanitary pad/cloth. Very few (1%) do not wash their hands.

More rural respondents have heard about HIV/AIDS (81%) but out of that only 20% know that AIDS is impossible to cure. Contrary to that, out of the 71% of urban girls who have heard about HIV/AIDS, 83% knew that it is impossible to cure. About other sexually transmitted infections, 41% rural respondents have heard about them, and 56% of those know their signs and symptoms. In contrast, out of 30% urban girls who have heard about STDs, 61% of them knew their signs and symptoms. Around 55% of both group respondents knew about some prevention method for AIDS/STIs (Table II).

Regarding the use of health care facility for SRH issues, only 20% of urban respondents have sought some medical help, of which 100% was for some disorders involving menstrual cycle. As compared, almost 50% of the rural respondents visited some health facility, of which 73% were for disorders related to menstrual cycle, 3% for contraception, 10% for some sexually transmitted infections and 13% visited for pregnancy tests. Of all the urban females who

have visited, 83% preferred private setup, and only 17% opted government facility as an option for their treatment. Whereas, 54% of the rural respondents were in favor of a government setup, 23% for private 23% for local dai/faith healers etc (Table III).

urban areas and their awareness of various sexual and reproductive health matters was taken into consideration.

It is encouraging that many young people, living in a restrained rural environment have heard or discussed

Table II: Knowledge of Sexual & Reproductive Health Physiology And Issues				
Sexual Reproductive Health Physiology and Issues	Urban n=60	Rural n=60	x ²	P. Value
Menstruation (before attaining)	60%	48%	0.754	0.385
Hygiene during Menstruation				
Use of Cloth after Washing Bath (once or twice)	25%	18%	0.6	0.439
Hand wash (before & after both)	33%	60%	4.571	0.033
(Only after)	46%	36%	0.72	0.396
	53%	58%	0.134	0.714
Uterus as Organ for blood discharge	58%	65%	0.216	0.642
First Intercourse can result in Pregnancy	31%	51%	2.88	0.09
High Chance of Pregnancy at mid cycle	18%	21%	0.167	0.683
HIV/ AIDS	71%	81%	0.391	0.532
AIDS is incurable	83%	20%	14.696	<0.001
STDs	30%	41%	1.14	0.286
Signs and Symptoms of STDs	61%	56%	0.615	0.433
Prevention of STDs / AIDS	56%	54%	0.243	0.622

Table III: Use and perceptions of health services for sexual & reproductive Health issues				
Use and Perceptions of Health Services	Urban (n=60)	Rural (n=60)	x ²	P. Value
Visited Health Facility for SRH problem	20%	50%	7.714	0.005
Reasons of Visit				
Problem in Menstrual Cycle	100%	73%	2.941	0.086
Setup				
Government	17%	54%	10.889	<0.001
Private	83%	23%	0.529	0.467
Dai/ Faith Healer	-	23%	7	0.008

Lastly, almost 100% of the respondents expressed their willingness to receive the knowledge or education regarding SRH, provided it is disseminated through schools, peers and print media. Furthermore, a large majority volunteered to receive any informal training on reproductive health and to serve as a source of knowledge and guidance for their peers regarding their sexual, reproductive and general health issues.

Discussion

Youth represents the energy of the present and the hope of the future. Adolescence is a crucial period in life when the girl is getting prepared for her reproductive roles in future. Only healthy and fit adolescent seedlings of today can evolve into a beautiful tree of future.³

In the present study, an equal number of adolescents were selected and assessed from rural as well as

various issues of sexual and reproductive health, such as physical changes during puberty, menstruation and menstrual hygiene, physiology of human reproduction, sexually transmitted infections and AIDS, their treatment and methods of prevention. Their prime source of information on these issues being a doctor or other health care staff and also their use and perceptions of health services is quite a surprising outcome of this study, which shows that they seek answers to their concerns and queries, owing to their continuing biological development and emotional immaturity.

Adolescents in urban area were more in the favor of exchanging views on sexual and reproductive health with their mothers, friends or sisters. Their knowledge regarding HIV/AIDS was satisfactory as the majority has heard about it and knew it is incurable, but an average number knew that other sexually transmitted diseases exist and even lesser knew about any signs

and symptoms, treatment and prevention. Despite having easy access to health care facilities, they did not seem interested in seeking much medical help regarding their issues, the main reason being their busy schedules and tough routine, which is rather distressing.

The demand for SRH programs is growing in developing countries. However, extreme disparities appear that pertain to adolescents and young adults.¹⁶ They need to be equipped with the knowledge to protect themselves and their families from sexual and reproductive health issues.

Interestingly, they all are willing to receive such knowledge. However, it has to be done ideally through peers, print media or trained health personnel.⁹ Other researchers have also shown that 'peer education' has been the most acceptable and feasible strategy to disseminate maximum knowledge and information among adolescents.^{10,11} The main concern is that one may question the quality and authenticity of information passed on in case of peers talking to peers. Nonetheless, peers could be very resourceful if they are well trained and mentored first.^{12,13} Doctors and community health workers can play an instrumental role in educating these peers.¹⁴ The large network of Lady Health Workers in Pakistan can be very effective in educating young unmarried girls at their doorsteps. As it is depicted in our results also, female physicians and family doctors could be more amicable for providing reproductive health screening and counseling.¹⁵ Different channels of communication ought to be used to raise awareness among the adolescent population.⁹

To design effective programs, an in depth research regarding socio-cultural factors affecting the promotion of sexual and reproductive health is also direly needed, and more importantly, it has to be translated into policies.^{17,18,19} Social marketing, for instance, has the potential to present an integrated approach to tackle issues of adolescents and young adults through mass media, peers, health education campaigns, street theatres, and youth-friendly services.²⁰

Life skills programs should be designed to increase unmarried girls' cognitive skills, self-confidence and ability to negotiate circumstances that affect their lives and wellbeing.^{8,21}

All other stakeholders including researchers, health care providers, and policymakers should be involved to assess their perceptions regarding SRH, the problems, and suggestions to help raise awareness and utility of services offered. Route, parents, teachers and other trusted adults with whom young people interact need to be sensitized with regard to the importance of communicating about sexual matters with youth and of providing a supportive and nonjudgmental environment.^{8,22,23}

Conclusion

In the present study, poor knowledge about reproductive system physiology in both groups is the main concern right now, followed by use and perceptions of health services and awareness of HIV/AIDS and other STDs, their prevention, spread and treatment, especially in urban adolescents. It is the need of time to work towards raising awareness among the concerned age group about their reproductive health matters and to provide them with basic sexual reproductive health knowledge.

Peers, family doctors, and media could be an acceptable source of information on reproductive health. Life skills programs to increase unmarried girls' cognitive skills and young men's involvement in such programs is a must.

References

1. Text book of public health and community medicine. 1st ed. Pune: Department of community medicine armed forces medical college, in collaboration with World Health Organisation; 2009.p.856.
2. Progress45(1998).Available online at www.who.int/reproductive-health/hrp/progress/45/prog45.pdf. Surfed on 15th May 2018.
3. International Journal of Reproduction, Contraception, Obstetrics and Gynecology
Samarth S et al. *Int J Reprod Contracept Obstet Gynecol.* 2014 Dec;3(4):1010-1014
www.ijrcog.org pISSN 2320-1770 | eISSN 2320-1789. "Study of various gynaecological problems and reproductive health awareness amongst adolescents at a rural setup in central India" Snehal Samarth*, Saunitra Inamdar, Chella Hariharan, Kanika R. Kalyani.
4. UNFPA. The state of the world population, 2003. Making one billion count: investing in adolescents" health rights. In: UNFPA, eds. A Report. New York: UNFPA; 2006.
5. Nidhi Kotwal, Nilofer Khan and Shashi Kaul. "A review of the effectiveness of the interventions on Adolescent Reproductive Health in Developing countries", International Journal of Research and Publications 2014; 4 (5): 2250-3153
IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) e-ISSN: 2279-0853, p-ISSN: 2279-0861. Volume 14, Issue 2 Ver. VII (Feb. 2015), PP 54-59 www.iosrjournals.org

- DOI: 10.9790/0853-14275459 www.iosrjournals.org 54 | Page. "A Study of Awareness of Reproductive Health among College Students of Visakhapatnam" Sailaja Gollakota & Seshagiri Rao Mylavaram & Padmavathi K. <https://pdfs.semanticscholar.org/557e/f312d3ff3e96a47a1238be04dc0ef91f0251.pdf>
6. IJCRR Section: Healthcare Sci. Journal Impact Factor 4.016 (Int J Cur Res Rev | Vol 7, Issue 18, September 2015). *Study on reproductive health awareness among adolescent girls in urban and rural field practice areas of Osmania Medical College*. G. Sudha Rani, B. Babu Rao.
 7. Illustrative Questionnaire for Interview Surveys with Young People, John Cleland <http://www.who.int/reproductivehealth/topics/adolescence/questionnaire.pdf>
 8. *Assessing knowledge, exploring needs: A reproductive health survey of adolescents and young adults in Pakistan* European Journal of Contraceptive and Reproductive Health Care 2006
DOI: 10.1080/13625180500389463 · Source: PubMed
 9. World Health Organization. *The Health of Young People: A Challenge and a Promise*. Geneva: World Health Organization, 1994.
 10. Adjahoto EO, Hodonou KA, de Souza AD, Tete VK, Baeta S. *Information des jeunes en matière de sexualité*. Sante' 2000;10(3):195-9.
 11. Ozcebe H, Akin L. 'Effects of peer education on reproductive health knowledge for adolescents living in rural areas of Turkey'. *J Adolesc Health* 2003;33:217-8.
 12. Baudier F, Bonnin F, Michaud C. *Les groupes de pairs et la promotion de la sante' La sante' de adolescents: Approche, soins, prevention*. Lausanne: Payot, Paris: Doin, Montre'al: Press de l'Universite', 1997, pp. 94-9.
 13. Taramaraz O. L'e'ducation par les pairs a l'e'cole. *Rev Edu Sante'* 1995;103:2-13
 14. Ali M, Bhatti MA, Ushijima H. Reproductive health needs of adolescents males in rural Pakistan: An exploratory study. *Tohoku J Exp Med* 2004;204:17-25.
 15. Kelts EAS, Allan MJ, Klein JD. Where are we on teen sex? Delivery of reproductive health services to adolescents by family physicians. *Fam Med* 2001;33(5):376-81.
 16. Arulkumaran S. Reproductive health care for adolescents. *Int J Gynaecology & Obstetrics* 2001;75:109-10.
 17. Gupta N, Mathur AK, Singh MP, Saxena NC. Reproductive health awareness of school-going, unmarried, rural adolescents. *Indian Journal of Pediatrics* 2004;71(9):797-801.
 18. Hughes J, McCauley AP. Improving the fit: adolescents' needs and future programs for sexual and reproductive health in developing countries. *Stud Fam Plann* 1998;29(2):233-45
 19. Pachauri S, Santhya KG. Reproductive choices for Asian Adolescents: A focus on contraceptive behavior. *Int Fam Plan Perspect* 2002;28(4):186-95.
 20. Agha S. A quasi-experimental study to assess the impact of four adolescent sexual health interventions in Sub-Saharan Africa. *Int Fam Plan Perspect*, 2002; 28(2): 67-70, 113-8.
 21. International Centre for Research on Women. *Youth, Gender, Well-Being and Society: Emerging Themes from Adolescent Reproductive Health Intervention Research in India*. Washington, DC: International Centre for Research on Women, 2004.
 22. Jeejeebhoy SJ, Bott S. *Non-consensual Sexual Experiences of Young People: A Review of the Evidence from Developing Countries*. Regional working papers, Population Council. New Delhi, 2003.
 23. Ali M, Rizwan H, Ushijima H. Men and reproductive health in rural Pakistan: The case for increased male participation. *European Journal of Contraceptive and Reproductive Health Care* 2004;9:260-6.