

# ADOLESCENT HEALTH AND HEALTHCARE DELIVERY IN INDIA : A REVIEW

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## Abstract

Adolescence is a transition phase from childhood to adulthood characterised by rapid physical growth, social and psychological maturity and onset of reproduction cycle. Adolescents face widely pervasive health issues such as teenage pregnancy, unsafe abortion, sexually transmitted diseases, malnutrition, psychiatric morbidity and substance abuse. Mortality and morbidity occurring during adolescence are mostly preventable if appropriate intervention strategies are undertaken. Investing in adolescent health accords top priority as they will play a vital role in India's future socio-economic development. The Government of India is also sensitive of the fact and has formulated various policies and programmes. A review of adolescent health status and healthcare delivery system will help in understanding and strengthening the activities.

**Key words:** Alcohol dependence syndrome, personality disorders

## Introduction

According to the World Health Organisation adolescents are those persons in the age group of 10 to 19 years. India has 243 million adolescent people constituting about 21.4% of the country's total population [1]. Adolescence is an important phase in life as it gives a second chance to improve the health and well being of a child in their second decade as well as an opportunity to mitigate emergence of risk factors that may lead to diseases in adulthood. The health status of adolescents even reflects on the health and well being of the next generation. Although adolescence is considered to be a healthy phase, more than 33% of the disease burden and almost 60% of premature deaths among adults can be associated with behaviours or conditions that begin or occur during adolescence for example, tobacco and alcohol use, poor eating habits, sexual abuse and risky sex [2]. The adolescence phase is marked by special characters like rapid physical growth, social and psychological maturity, beginning of menstrual cycle in girls and onset of reproduction cycle and development of adult mental processes and adult identity [3]. During the process of transition to adulthood they face risk of acquiring reproductive and sexual health problems, psychiatric disorders and nutritional maladjustments. Appropriate intervention strategies will cherish the goal of a healthy adolescence. Today's adolescents will determine the social structure, economic productivity, well-being of India, and also their experiences will influence the goal of achieving population stabilisation as mentioned in the National population policy, 2000. In recognition of the importance of investing in adolescents health and India's commitment to achieve Millennium Developmental goals 4 and 5, several national policies and programmes are implemented now and then to address the needs of this group. The purpose of this review is to get an insight of adolescent focussed healthcare services, and the challenges and issues that are concerned.

## Adolescent Health Problems

The common health issues faced by the adolescents are sexual and reproductive (SRH), malnutrition, psychiatric, substance abuse and accidents. Sexual and reproductive ill health is the major cause of mortality and morbidity in adolescents. Initiation of sexual activity while they lack adequate knowledge and skills for protection places adolescents at a higher risk of unwanted pregnancy, unsafe abortion and sexually transmitted infections including HIV/AIDS [4]. NFHS-3 data shows that 27% of girls and 3% of boys in the age group of 15-19 were married at the time of survey and that 12% of all girls aged 15-19 years have already had a child and 4% are currently pregnant. About 16 to 19% of the total pregnancies are teenage pregnancies [5]. The risk of maternal death is about three times higher in girls aged 15-19 years and five times higher in those younger than 15 years compared to women in their 20s, which is mainly due to unsafe abortion and post partum haemorrhage. Unmet needs for family planning especially for spacing are high among adolescents at 24.7% in 2006. In a report released in 2007, revealed that 16.8% young women and 4.5% young men had experienced symptoms of genital infection in the preceding three months of the survey period [6]. Studies have reported that adolescent girls seek healthcare for problems like dysmenorrhoea, irregular menstrual cycles, white discharge and pruritis vulvae [7,8,9]. Poor menstrual hygiene is one of the leading causes for reproductive tract infections in Girls. Another study found that the prevalence of HIV in 15 to 19 years is 0.04% and 11% reported symptoms of sexually transmitted infections within twelve months of survey period [10].

Another major problem for adolescents is nutrition. More than half (56%) of girls and 30% of boys in the age group 15-19 are anaemic and almost half (47%) of girls and 58% boys are underweight with Body Mass Index of < 18.5 kg/m<sup>2</sup> [11]. The prevalence of overweight in adolescents as reported by studies are in the range of 10 to 19% indicating a early onset of

obesity and is more pronounced in urban school students [12,13,14]. Problem of obesity is emerging in urban adolescents because of unhealthy eating, more intake of junk foods and fast foods, as also physical inactivity [3].

Mental health problems are also on the rise among adolescents. The world mental health survey found that many mental health disorders usually start during childhood or adolescence, although diagnosis and treatment may be delayed for years [15]. The prevalence of psychiatric morbidity among adolescents is in the range of 12 to 20% as reported in many studies in India. The pattern of symptoms include depression, conduct disorder, social anxiety and panic disorder [16, 17, 18]. In India suicide is also high among adolescents than any other age group. Both mental and physical stress has been attributed to the rise in psychological problems. The prevalence of stress among adolescents is reported in the range of 16 to 25% [19].

Tobacco, Alcohol and substance abuse are current serious issues concerned with adolescents as they are ignorant about its long term effects. The global youth tobacco survey across India reported an increase in the use of any form of tobacco from 13.7 to 14.6% and cigarette users from 3.8 to 4.4% between 2006 to 2009 among adolescents [20]. A national level study found that 11% males and 1% females consumed alcohol with more consumption pattern in the urban areas than rural areas [10]. In a study among 9th to 12th grade students it was reported that 31.3% regularly use one or more substance [21].

It is important to mention that the morbidity and mortality due to road traffic accidents and violence is also a cause of concern in this group. In a study in Delhi it was found that almost 77% of Adolescents were 'at risk' with regard to behaviours related to road safety are concerned [22].

## Adolescent Health Care in India

There are many healthcare programmes under various ministries to address the problems of adolescents which are highlighted in Table 1. Other general adolescent involved programmes like the Nehru Yuva Kendra Sangathan (NYKS), National Service Scheme (NSS), Sarva Shiksha Abhiyan (SSA), and Integrated program for street children are also important resource for the well being of this group. The Ministry of Youth Affairs and sports (MOYAS) has developed a facilitator's manual on adolescent health and development in the year 2006 and have undertaken training of teachers and distributed learning resource material in the form of 12 modules to various NSS units, NYKS, and parent community [3]. Various Non Governmental organisations also integrate with the state to effectively address the adolescent health issues. Driving these programmes are the policies framed by the state such as National population policy, National Policy for Empowerment of Women, National Health Policy and National Youth Policy. The importance of adolescent care was also stated in the five year plans, the Ninth Five Year Plan placing special emphasis like, expansion of the adolescent girl's scheme

and on assessing the health needs of adolescents in the Reproductive and Child Health (RCH) programme [23]. More than 6000 adolescent friendly health clinics at District Hospitals, CHCs and PHCs are functional, 7224 Medical Officers and 19112 ANM/LHV/Counselors have been trained on offering adolescent friendly health services across the country. The MOHFW has rolled out a scheme to provide sanitary napkins to rural adolescent girls and also to ensure that they get adequate knowledge and information about menstrual hygiene. A weekly Iron and Folic acid supplementation (WIFS) programme, which will provide 100mg elemental Iron and 500µg Folic acid using a fixed day approach has also been introduced in many states [24].

## Challenges and issues concerning adolescent health care

As the Government's commitment to address the adolescent health needs by offering various programmes is acclaimed, there exist a gap between the service availability and the effective utilisation of such services by the target group. Socio-cultural factors pose a major challenge in bringing the adolescents under the purview of health care. In a conservative society where reproductive and sexual health related issues are taboo for discussion, young people are hindered from actively seeking counsel for their needs. Early marriage of girls in practice is still a scourge in India. Married adolescent girls have little decision making power in the family, are socially isolated and so less likely to access the services [29]. Data on adolescents from national surveys including NFHS -3, DLHS-3 and SRS has revealed that only 14% of married girls in the 15-19 age group have received complete antenatal care. In general these young people tend not to use existing reproductive health care services because of their belief that these services are not intended for them, concern that the staff will be hostile or judgemental, fear of medical procedures and contraceptives, lack of privacy, confidentiality, fear that their parents might learn of their visits, and shame, especially if the visit follows oppression or abuse [30,31,32]. Though school based programmes have a better impact, many boys and girls of economically weaker sections of the society and those from rural areas are school dropouts. Knowledge and awareness regarding sexual and reproductive health among adolescents is still below average and most of them felt that their problems doesn't require visit to a health facility or just took home remedies [7].

As far as programme implementation is concerned, adolescent services operate under various ministries and some of the components of service overlap between them which may cause confusion and impede the effective utilisation of men, material and money. The ministry of youth affairs (MOYAS) has been designated as nodal ministry for adolescent related interventions, but it is not a member in the mission steering group and the empowered committee under the National Health Mission (NHM), which may lack the power for its nodal role. ARSH has been an important inter-sectoral development under NHM. In case of inter-sectoral collabo-

ration there should clarity on the role and limitations of each sector on what they can do [33]. In a survey conducted to ascertain the views of health care providers in three Indian states it was found that the care givers were receiving, little training, if any, in non-judgemental communication methods with young people on sensitive topics, especially with opposite-sex adolescents, increasing provider discomfort with this topics. In a study conducted by the International Institute for Population Sciences and Population Council it was reported that just seven percent of young men and three percent of young women reported ever receiving information on sexual matters from a health care provider [34]. As there is no separate manpower for adolescent health programmes, it is usually an extra burden on healthcare providers to handle sensitive issues of adolescent health, as it requires adequate time to gather information from clients.

## CONCLUSION

In the path to strengthen the adolescent health services ,current situation demands a single comprehensive programme under one ministry which will cover outreach activities as well as clinic based services. Community based approach should focus on behaviour change communication, improving the knowledge, awareness and attitude of adolescents in health, regular screening and health survey whereas adolescent friendly clinics should be a 'one-stop' shop which will provide professional based preventive and promotive care for sexual and reproductive, psychiatric ,nutritional and substance abuse problems. These clinics should be organised at primary, secondary and tertiary levels of healthcare in a holistic concept and ensuring continuum of care and support. With the broad objective each state can organise the services suitable to their needs and situation analysis. Evaluation should be undertaken on a regular basis, which is a key to the success of these programmes. The programme should target parents, teachers, and community leaders as intermediaries in defining, planning and implementing adolescent services. As we progress with motivation and adopting best practices, India will soon transmute from 'health for adolescents' to 'health with the adolescents'.

## References

1. Who.int. PMNCH | Government of India launches new health programme for adolescents [Internet]. 2015 [cited 11 September 2015]. Available from: [http://www.who.int/pmnch/media/events/2014/india\\_new\\_rksk/en/](http://www.who.int/pmnch/media/events/2014/india_new_rksk/en/)
2. A strategic approach to reproductive, maternal, newborn, child and adolescent health in India. MOHFW; 2013.pp 13-14.
3. Sunderlal, Adarsh, Pankaj. Textbook of Community Medicine. 3rd ed. CBS publishers; 2011.pp 154-160.
4. Searo.who.int. SEARO | Adolescent Sexual Reproductive Health [Internet]. 2015 [cited 11 September 2015]. Available from: [http://www.searo.who.int/entity/child\\_adolescent/topics/adolescent\\_health/adolescent\\_sexual\\_reproductive/en/](http://www.searo.who.int/entity/child_adolescent/topics/adolescent_health/adolescent_sexual_reproductive/en/)

5. UNFPA Note on ARSH. [Internet]. 2015 [cited 11 September 2015]. Available from: [.http://countryoffice.unfpa.org/india/drive/NoteonARSH.pdf](http://countryoffice.unfpa.org/india/drive/NoteonARSH.pdf)
6. Youth in India: Situation and needs.2006-2007. Mumbai: International Institute of Population Science; 2010.
7. Joshi B, Chauhan S, Donde U, Tryambake V, Gaiwad N, Bhadoria V. Reproductive health problems and help seeking behavior among adolescents in urban India. *Indian J Pediatr.* 2006;73(6):509-513.
8. Subrata B, Manjulika D, Ritupama D. study of reproductive health problems among rural adolescent girls of Mohanpur block of West Tripura district. *Al Ameen J Med Sci.* 2014;7(1):78-82.
9. Chandra Mohan K, Suresh B. ,Reproductive Health Problems of Adolescent Girls between 15 and 19 in Andhra Pradesh. *Pak Peds J.* 2012;36(4):225-234.
10. Sulabha P, Sunitha K, Shri kanth S, Vaidehi Y. A Profile of Youth in India. National Family Health Survey (NFHS-3), India, 2005-06. Mumbai: International Institute of Population sciences; 2009.
11. Status of children 14-18 years. Ncpcr.gov.in. [Internet]. 2015 [cited 11 September 2015]. Available from: [http://ncpcr.gov.in/view\\_file.php?fid=466](http://ncpcr.gov.in/view_file.php?fid=466)
12. Kumar S, Kotian S, Kotian M. Prevalence and determinants of overweight and obesity among adolescent school children of South Karnataka, India. *Indian J Community Med.* 2010;35(1):176.
13. Agarwal T, Bhatia R, Singh D, Sobti P. Prevalence of obesity and overweight in affluent adolescents from Ludhiana, Punjab. *Indian Pediatrics.* 2008;45:500-502.
14. Laxmaiah A, Nagalla B, Vijayaraghavan K, Nair M. Factors Affecting Prevalence of Overweight Among 12- to 17-year-old Urban Adolescents in Hyderabad, India. *Obesity.* 2007;15(6):1384-1390.
15. Patton G, Coffey C, Romaniuk H, Mackinnon A, Carlin J, Degenhardt L et al. The prognosis of common mental disorders in adolescents: a 14-year prospective cohort study. *The Lancet.* 2014;383(9926):1404-1411.
16. Srinath S, Girimaji S, Gururaj G, Seshadri S, Subbakrishna D, Bola P. Epidemiological study of child & adolescent psychiatric disorders in urban & rural areas of Bangalore. *Indian J Med Res.* 2005;122:67-69.
17. Anitha S, Gaur D, Vohra A, Subhash S, Khurana H. Prevalence of psychiatric morbidity among 6 to 14 years old childre. *Indian J Community Med.* 2003;28(3):133-137.
18. Ahmad A, Khalique N, Khan Z, Amir A. Prevalence of psychosocial problems among school going male adolescents. *Indian J Community Med.* 2007;32(3):219.

19. Varun K, Richa T. Determinants of psychological stress and suicidal behavior in Indian adolescents: a literature review. *J Indian Assoc Child Adolesc Ment Health*. 2014;10(1):47-68.
20. Gajalakshmi V, Kanimozhi C. A survey of 24,000 students aged 13-15 years in India: Global Youth Tobacco Survey 2006 and 2009. *Tob Use Insights*. 2010;3:23-31.
21. Juval R, Bansal R, Kishore S, Negi K, Chandra R, Semwal. Substance use among intercollegiate students in district Dehradun. in *Indian J Community Med*. 2006;31:252-254.
22. Sharma R, Grover V, Chaturvedi S. Health-risk behaviors related to road safety among adolescent students. *Indian Journal of Medical Sciences*. 2007;61(12):656.
23. Anil Kumar J. Problems and Perceptions of Adolescent girls in India : A Case Study. *J Environ Res Develop*. 2015;7(2A):1092-1099.
24. Maternal health programme. Annual report,2013-2014 [Internet]. 2015 [cited 11 September 2015]. Available from: <http://www.mohfw.nic.in/WriteReadData/l892s/Chapter415.pdf>
25. Guidelines for BSY.Wcd.nic.in. November, 1999 [Internet]. 2015 [cited 11 September 2015]. Available from: <http://wcd.nic.in/BSY.htm>
26. Rajiv Gandhi Scheme for Empowerment of adolescent Girls. The scheme [Internet]. 2015 [cited 11 September 2015]. Available from: <http://wcd.nic.in/SchemeSabla/SABLAscheme.pdf>
27. National Tobacco Control Programme, operational guidelines [Internet]. 2015 [cited 11 September 2015]. Available from: <http://mohfw.nic.in/WriteReadData/l892s/2945310979Operational%20Guidelines.pdf>
28. Rashtriya Kishor Swasthya Karyakram .Nhm.gov.in. Background - Government of India [Internet]. 2015 [cited 11 September 2015]. Available from: <http://www.nhm.gov.in/nrhm-components/rmnch-a/adolescent-health-rksk/rksk-background.html>
29. Nath A, Garg S. Adolescent friendly health services in India: A need of the hour. *Indian Journal of Medical Sciences*. 2008;62(11):465.
30. Santhya K, Prakash R, Jeejobhoy S, Singh S. Accessing Adolescent Friendly Health Clinics in India: The Perspectives of Adolescents and Youth. New Delhi. New Delhi: Population Council; 2014.
31. World Health Organization. Department of Child and Adolescent Health and Development. Global consultation on adolescent friendly health services: a consensus statement, Geneva, 7â€“9 March 2001 [Internet]. 2001 [cited 11 September 2015]. Available from: [http://www.who.int/maternal\\_child\\_adolescent/documents/pdfs/who\\_fch\\_cah\\_02.18.pdf](http://www.who.int/maternal_child_adolescent/documents/pdfs/who_fch_cah_02.18.pdf)
32. Agarwal R. . Promoting adolescent friendly reproductive and sexual health services. *Indian Pediatrics*. 2008;45:881-882.
33. Gupta M, Ramani K, Soors W. Adolescent Health in India: Still at Crossroads. *Advances in Applied Sociology*. 2012;02(04):320-324.
34. Popcouncil.org. Client and Provider Perspectives on Adolescent Reproductive and Sexual Health Services in India | Population Council [Internet]. 2014 [cited 11 September 2015]. Available from: <http://www.popcouncil.org/news/client-and-provider-perspectives-on-adolescent-reproductive-and-sexual-health>

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TABLE 1.ADOLESCENT HEATH PROGRAMMES IN INDIA

	<b>Programme component</b>	<b>Ministry</b>	<b>Year</b>	<b>Strategy</b>
1	School health programme <sup>3</sup>	Health & Family welfare	1960	School based health check-up, Nutritional interventions, promoting healthy lifestyle, counselling and immunization
2	Balika samridhi yojana <sup>25</sup>	Women and child development	1997	Services to rise the age of marriage and to improve enrolment and retention of girls at school, to change the negative attitude of family & community towards girl child.
3	Kishori shakti yojana(KSY) <sup>3</sup>	Women and child development	2000	Scheme 1:girl to girl approach for 11-15 yrs girls  Scheme 2: Balika Mandal for 11-18 yrs girls. Both provide supplementary nutrition and health education at ICDS centres.
4	Nutrition programme for adolescent girls(NPAG) <sup>26</sup>	Women and child development	2002	6 kg of free food-grains (wheat/rice/Maize based on habitual consumption pattern of the state) /per month per beneficiary for adolescents <35 kgs along with Nutrition Education
5	Adolescent reproductive and sexual health programme (ARSH) <sup>3</sup>	Health & Family welfare	2006	Improved service delivery during routine check up at sub centres, special adolescent clinics on fixed days and timings at PHCs and CHCs.Concept of core package of preventive, promotive and counselling services for reproductive and sexual problems.
6	National AIDS Control Programme Phase –III <sup>3</sup>	Health & Family welfare	2007	Focus on life skills education, Red Ribbon Express project exhibition for students. linkages with Integrated Counselling and Testing Centres  (ICTCs) and making appropriate referrals for HIV testing and RTI/STI management
7	National tobacco control programme <sup>27</sup>	Health & Family welfare	2008	Prohibition of sale to & by minors. Ensuring smoke free educational institution
8	Rajiv Gandhi Scheme for Empowerment of Adolescent Girls(SABLA) <sup>26</sup>	Women and child development	2011	Merged the services of Balika samridhi yojana and Nutrition programme for adolescent girls +inform and guide them about existing public services, such as PHC, CHC.
9	Rashtriya Kishor Swasthya Karyakram (RKSK) <sup>28</sup>	Health & Family welfare	2014	Scope of coverage to combat nutrition, mental health, injuries&violence, substance abuse problems. Outreach by counsellors, facility based counselling, behaviour change communication, strengthening of AFHCs.