RECOMMENDATIONS

Indian Academy of Pediatrics Consensus Guidelines for Adolescent Friendly Health Services

PREETI M GALAGALI,[1] CHANDRIKA RAO,[2] CHITRA DINAKAR,[3] PIYUSH GUPTA,[4] DHEERAJ SHAH,[5] SHILPA CHANDRASHEKARAIAH,[6] JAYASHREE KANTHILA,[7] DIGANT SHASTRI,[8] R REMESH KUMAR,[9] MKC NAIR[10]

From [1]Bengaluru Adolescent Care and Counselling Centre, Bengaluru, Karnataka; [2]Departments of Pediatrics, MS Ramaiah Medical College and Hospital, Bengaluru, Karnataka; [3]St John's Medical College Hospital and St John's National Academy of Health Sciences, Bengaluru, Karnataka; [4,5]University College of Medical Sciences and GTB Hospital, New Delhi; [6]Karanataka Institute of Medical Sciences, Hubballi, Karnataka; [7]Kasturba Medical College, Mangalore, Karnataka; [8]President and [9]Honorary Secretary-General, Indian Academy of Pediatrics, 2019; [10]NIMS-SPECTRUM-Child Development Research Centre, NIMS Medicity, Thiruvananathapuram, Kerala.

Correspondence to: Dr Preeti M Galagali, Director and Adolescent Health Specialist, Bengaluru Adolescent Care and Counselling Centre, 528 2nd Block Rajajinagar, Bengaluru 560 010, Karnataka. drpgalagali@gmail.com

Justification: Adolescent health is critical to the current and future well- being of the world. Pediatricians need country specific guidelines in accordance with international and national standards to establish comprehensive adolescent friendly health services in clinical practice. **Process**: Indian Academy of Pediatrics (IAP) in association with Adolescent Health Academy formed a committee of subject experts in June, 2019 to formulate guidelines for adolescent friendly health services. After a review of current scientific literature and drafting guidelines on each topic, a national consultative meeting was organized on 16 August, 2019 for detailed discussions and deliberations. This was followed by discussions over e-mail and refining of draft recommendations. The final guidelines were approved by the IAP Executive Board in December, 2021. **Objective**: To formulate guidelines to enable pediatricians to establish adolescent friendly health services. **Recommendations**: Pediatricians should coordinate healthcare for adolescents and plan for transition of care to an adult physician by 18 years of age. Pediatricians should establish respectful, confidential and quality adolescent friendly health services for both out-patient and in-patient care. The healthcare facility should provide preventive, therapeutic, and health promoting services. Pediatricians should partner with the multidisciplinary speciality services, community, and adolescents to expand the scope and reach of adolescent friendly health services.

Keywords: *Counseling, Health care transition, Standards, Universal health coverage, Young adults*.

Published online: April 26, 2022; ***PII:*** S097475591600423

India has the largest population of adolescents in the world numbering 251 million [1]. Investment in adolescent well-being will ensure health and progress of the nation. Adolescents need age appropriate information, a safe environment to develop life skills, and a responsive healthcare system [2]. Globally, health services for adolescents are disorganised, poorly coordinated and uneven in quality [3]. Rashtriya Kishor Swasthya Karyakaram (RKSK), the national adolescent health program of India, aims to establish adolescent friendly health services (AFHS) and community services for universal health coverage [1]. Indian Academy of Pediatrics (IAP) has been at the forefront of compre-hensive adolescent health care since more than two decades [4,5], and carried out this activity to further its agenda of providing quality adolescent healthcare.

NEED FOR ADOLESCENT FRIENDLY HEALTH SERVICES (AFHS)

Adolescents have a developmental need for autonomy and usually hesitate to seek help for the fear of being shamed, judged, and reprimanded. They prefer to seek confidential care regarding sensitive issues like sexuality, body image, mental distress, and substance use. Community-based surveys have revealed several barriers to the utilization of healthcare services (**Table I**) [6-8]. Need based AFHS should be designed by partnering with the adolescents and their caregivers to overcome these barriers [9,10].

AFHS are defined as developmentally appropriate comprehensive health services for health promotion, disease prevention and treatment of adolescents [11,12]. At AFHS, the adolescents feel safe, secure, and confident to discuss their problems, confide and seek help. WHO has outlined five essential criteria for qualifying health services as adolescent friendly (**Box I**).

Adolescent Health Policy and Programs

The first national adolescent health policy, Adolescent Reproductive and Sexual Health (ARSH) Strategy was initiated by Ministry of Health and Family Welfare in 2005 that outlined criteria for AFHS in India [13]. This was

Table I Barriers in Utilization of Adolescent Healthcare Services

Adolescents and caregivers	*Healthcare providers*	*Healthcare facility*
Ignorant about the importance of adolescent health and wellness check ups	Inadequate knowledge and training regarding AFHS	Lack of privacy
Lack of knowledge regarding availability of AFHS	Difficulty in implementation of consent and confidentiality as per existing laws	Lack of confidential healthcare services
Discomfort, embarrassment, shame and stigma towards sharing health concerns, especially those related to mental disorders and sexuality	Inability to provide care without parental involvement	Lack of training personnel
Lack of respect, privacy and confidentiality	Lack of clarity regarding policies of healthcare for married adolescents	Unaffordable healthcare
Overcrowding	Time constraints	Inconvenient location and timings
Prolonged waiting time		
Absence of same sex healthcare provider		Services do not cater to needs of adolescents
Financial constraints		

Prepared from material available in the references 32-34.

followed by the Reproductive, Maternal, Newborn Child plus Adolescent Health (RMNCH+A) policy in 2013 with focus on the continuum of healthcare over the entire life span [14]. In 2014, the National Adolescent Health Program called Rashtriya Kishor Swasthya Karyakaram (RKSK) was launched under the National Health Mission [1]. In 2018, under Ayushman Bharat, a school health program was launched to augment RKSK and Rashtriya Bal Swasthya Karyakram (RBSK) programs [15].

OBJECTIVE

To formulate guidelines for organizing adolescent friendly health services and to enable pediatricians to establish these services at the existing pediatric facilities.

PROCESS

The process of forming the IAP guidelines for AFHS was initiated on 1 June, 2019 with the formation of a national committee of subject experts in collaboration with Adolescent Health Academy (AHA). Six subgroups of experts including adolescent health specialists and pediatricians were formed to evaluate scientific evidence regarding existing adolescent health status and services, rationale and concept of AFHS, national adolescent health policy and program, training in adolescent health at undergraduate and postgraduate levels, age of pediatric care, basic AFHS and expanded/specialized adolescent services. Each sub-committee reviewed the published literature using search engines like PUBMED, SCOPUS, EMBASE. After multiple rounds of discussions, the sub-committees prepared draft guidelines pertaining to their respective topics. The draft guidelines were presented and discussed in depth at the National consultative meet conducted at Bangalore on 16 August, 2019. Further suggestions and the latest research were incorporated in the guidelines document, and the final document was prepared after consensus through a series of online and email discussions. The final guidelines were approved by the IAP Executive Board in December, 2021.

ADOLESCENT HEALTH: CURRENT STATUS

Adolescents (10-19 years), comprise 16% of the world population [16]. Their health is essential to achieve the sustainable developmental goals (SDG) by 2030 [17,18]. Adolescence is an age of vulnerability and opportunity [19]. Adolescents are vulnerable to risk taking behavior due to a highly reactive limbic system and reward centre, and an immature prefrontal cortex that controls emotions [19-21]. As the brain continues to mature until the late twenties, individuals from 10-24 years of age face similar risks to health and are grouped together as adolescents and young adults (AYAs) or young people. Young adults are defined as individuals between 18 to 24 years and youth as those from 15 to 24 years [17].

Lifestyle adopted in adolescence is known to track into adulthood. More than 70% of the premature mortality and morbidity in adults is due to diseases that begin in adolescence like malnutrition, substance use and mental disorders [17]. As the brain is still under construction in adolescence, there is a window of opportunity to intervene and motivate for a healthy lifestyle. Investment in adolescent health gives a triple dividend; it ensures the current health of adolescents, their health as adults and also of their children and future generations [20].

Canadian Pediatric Society and American Academy of Pediatrics have included adolescent care under the pediatric speciality [22-24]. In India, comprehensive care for

adolescents is sparse. Routine medical care is provided by general practitioners, physicians, pediatricians, gynecologists etc.

Healthcare transition (HCT) is defined as "a purposeful, planned process that addresses the medical, psychosocial, educational, and vocational needs of adolescents and young adults with chronic medical conditions, as they advance from a pediatric and familycentred to an adult, individual focused health care provider" [25]. There is a need to establish 'transition clinics' that promote shared care between the pediatric and the adult physicians and collaborations with the adolescents, parents, educa-tors, social workers and other healthcare professionals. The precise age for HCT depends on the developmental age of the patients, their health care needs, parental support and the expertise of the treating physician [26]. Studies from India have also reiterated the need for HCT services [27,28].

Indian Scenario

Adolescents comprise 18% of the Indian population [29]. Among young people aged 15 to 24 years, 28% are not in education, employment or training [29], and 27% of adolescent girls are married and 1% have experienced sexual violence [30]. In the last decade, an increase in high-risk sexual behavior from 64 to 70% has been estimated, among adolescent boys [31].

Diarrhea and tuberculosis are prevalent across all age groups and in both sexes. There exists a triple burden of malnutrition. There is high prevalence of short stature, underweight, anemia, and micronutrient deficiencies on one hand; whereas, 5% of adolescents are obese and over 70% have insufficient physical activity [32]. The prevalence of non-communicable diseases like hypertension, diabetes mellitus, mental disorders and smart-phone addiction is 5%, 15%,14% and 42%, respectively [32-34].

GUIDELINES

Age of Adolescence and Pediatric Care in India

Adolescent healthcare should be supervised and coordinated by a pediatrician from 10 to 18 years of age. This is in concurrence with the UN Convention on Child Rights (CRC) [35] and the current Indian laws. The Juvenile Justice Act 2015, Protection of Children from Sexual Offences Act 2012, RBSK and IAP define childhood similarly [4,36-38]. According to the Indian laws, an individual above the age of 18 years is considered as an adult [39]. Pediatricians, who follow most children from the newborn period onwards, and share a rapport with the child/adolescent and their family and are knowledgeable about the growth and development are the most suitable medical professionals to provide integrated health care to adolescents.

Age of Transition of Care to an Adult Physician

The transition to adult care should preferably be accomplished by 18 years of age. It should be conducted in a phased manner over a few months to years with due consideration for the individual patient and family needs [40,41]. A written HCT policy should be framed with roles of the pediatric team, the adult care team and allied health professionals clearly defined including preparing and motivating the adolescents and their families for transition with the help of a dedicated clinical coordinator and peer and family support groups. The adolescents should be ready and mature enough for the change, which involves taking primary responsibility for their own medical needs. They should understand all aspects related to the disease, treatment, adherence, prognosis and implications during adulthood. Prior to the final transfer, a detailed medical summary is made and a combined management plan discussed with the adult physician, adolescent and family. Wherever feasible, it is recommended that a transition clinic be established with continuum of 'shared care' for a few months/years pre- and post-transition with periodic feedback from the patient regarding quality of services provided.

Basic Adolescent Health Services

All pediatric facilities should provide AFHS. In outpatient care, pediatricians should schedule exclusive time for adolescent healthcare. AFHS should be designed according to the WHO's global standards for quality services [3].

Box I World Health Organization Criteria for Adolescent Friendly Health Services

Accessible: Services to be available on all weekdays. To be established in existing health facilities (e.g. hospitals and clinics) or in community settings (e.g. schools and anganwadis)

Acceptable: Respectful and confidential care to be provided

Equitable: Affordable healthcare to attain universal health coverage. The services to cater to the needs of all adolescents including urban, rural, out of school, orphans, disadvantaged, marginalised and married

Appropriate: Need-based preventive, curative and counselling services to be provided with the healthcare personnel adopting a respectful and non-judgemental attitude

Effective: Services to follow a standards driven quality improvement approach with an inbuilt mechanism to assess effectiveness at regular intervals along with a feedback from the adolescent clients

Prepared from material available in references 37 and 38.

In routine care, the pediatrician should spend a few minutes alone with every child above the age of 10 years, with parental consent, to elicit a brief HEEADSSS history and discuss management [5]. This would help in rapport building and convey the importance of confidential adolescent health care to the family. Before establishing AFHS, the pediatricians, should familiarize themselves with management of common adolescent health issues and adolescent care facilities in the community, train the ancillary health care staff (e.g., receptionist, laboratory technician) in the nuances of adolescent communication and establish medical, school and community networks to increase the scope and reach of the services. The existing out-patient pediatric facility can be converted into an adolescent friendly clinic by adopting the following changes in the structure, policy and clinical approach [39,42,43].

Structure of the adolescent clinic

- Waiting area should have an adolescent friendly décor, without baby posters and toys. Age appropriate health education material, posters, pamphlets and booklets should be available.
- Essential health care personnel should be available during the working hours of the clinic. These include a paediatrician, receptionist, a nurse and a laboratory technician (if a laboratory is attached to the clinic)
- Healthcare services that are provided by the clinic should be displayed in the waiting area (**Box II**)
- Consultation and examination rooms should preferably be separate with a door to allow for privacy. If a separate room is not available, the examination area should be cordoned off by a screen
- Equipment and materials at the center include orchidometer, adult sized stethoscope, blood pressure cuff, examination cot and weighing machine, stadiometer, IAP growth reference data, blood pressure centile, Tanners, immunization and Snellen charts, questionnaires like HEEADSSS, Patient Health Questionnaire-2 (PHQ-2), Screening for Childhood Anxiety Related Emotional Disorders (SCARED), Screening to Behaviour Intervention (S2BI) and Ask Suicide- Screening Questionnaire (ASQ) to screen for psychosocial issues, depression, anxiety, drug use and suicidal behavior respectively (**Web Box I**) [44-47]. Teen screening questionnaire-Mental Health (TSQ-M) is a validated Indian tool to screen for mental disorders [48].

Clinic Policy

- Exclusive timings for adolescent clinic should be scheduled during the day as adolescents do not like to be in the company of younger children at a healthcare facility. The timings should be convenient e.g adolescents going to school would prefer to access the healthcare facility in the evening.
- Registration should be easy and quick. The recep-tionist should be sensitive towards adolescents.
- Consultation should be both by walk-in and by appointment, and the waiting period should be minimal.
- Professional charges should be affordable and flexible to cater to the needs of marginalized adolescent.
- Consent and confidentiality policy should be according to the existing Indian laws. Adolescents above the age of 12 years can give consent only for history taking and examination and those above 18 years can give consent for investigation and drug therapy [39]. Assent should be taken from all adolescents for medical interventions in addition to the mandatory parental consent.
- Medical records should be kept confidential and privacy should be protected.
- Feedback from the adolescents and the parents should be taken regarding their satisfaction with healthcare services. Suggestions to improve should also be elicited and implemented [49,50].
- Regular evaluation regarding quality of services should be conducted [50].
- An adolescent friendly referral network comprising of (but not limited to) gynecologists, dermatologists, psychiatrists, psychologists, endocrinologists, orthopedic surgeons, dietitian, social workers, remedial educators, and NGOs should be established with their contact details readily available with the receptionist. The feasibility of conducting weekly specialized clinics at the AFHS should be discussed with the specialists to facilitate multidisciplinary care. [39]

Clinical Approach

Pediatricians should be sensitive and empathetic towards adolescents and their families. A clinical encounter with an adolescent usually takes 30-45 minutes. The first 5-10 minutes are spent with the adolescent and parents, the next 20

Box II Suggested List of Services at Adolescent Friendly Healthcare Center

- Management of physical and mental disorders
- Counselling
- Annual health and wellness check-ups
- Sports pre participation evaluation
- Immunization
- Sexuality and life skill education sessions
- Parental guidance
- Premarital counselling

minutes with the adolescent alone for eliciting a history, doing a physical examination, imparting anticipatory guidance and discussing the management. The last 10 minutes are spent with the patient and his/her parents reviewing the treatment plan. Personal information shared by the adolescent is kept confidential within limits. Confidentiality is broken in cases of child sexual abuse (CSA), suicidal behavior or ideation, conflict with law or hospitalization [39]. Under the Protection of Children from Sexual Offences Act (POCSO), cases of CSA have to be reported mandatorily to the police [37].

History taking: A routine pediatric history should be taken in the presence of parents or caregivers. Later a personal interview is conducted with the adolescent. Confidentiality rules should be expressed clearly before the interview. Ensuring auditory and visual privacy is essential to maintain an adolescent friendly ambience. Patient centered, effective communication is the corner-stone of establishing a therapeutic relationship. A clinician should master the art of verbal, non-verbal and active listening skills and ask open ended questions [39,43]. HEEADSSS is a tool for structuring the medical interview with the adolescents and their parents [51], and is a mnemonic and covers questions to ask in four important domains namely peer, family, self and academic. It indicates problem areas (e.g., substance use), identifies need of additional medico-social support services (e.g., HIV infection) and prioritizes management areas. It also identifies strengths of the adolescents and supportive adults who can partner to provide care. Screening questionnaires (**Web Box I**) and DSM 5 criteria aid in the diagnosis of mental disorders.

Physical examination: A male pediatrician should ensure the presence of a female health professional while examining a female adolescent. The pediatrician should assess weight, height and BMI (with plotting on growth chart), sexual maturity rating (SMR), blood pressure and examine vision, hearing, teeth, skin, thyroid and spine along with the conventional problem directed examination [39]. If an adolescent is reluctant for the genitalia examination during the first visit, SMR can be self-reported by visualizing the Tanner charts. In subsequent visits, after establishing rapport, SMR can be evaluated in privacy. Adolescents should be taught the technique of breast and testicular self-examination. Pelvic examination is conducted, if the adolescent is sexually active.

Anticipatory guidance: Every adolescent visit is an opportunity to provide anticipatory guidance to promote a healthy lifestyle and prevent high risk behavior [39]. (**Box III**) Positive coping strategies and protective factors like participation in hobbies, sports and parental and school connectedness are reinforced and encouraged. Adole-scents and their families are motivated to complete the IAP recommended adolescent immunizations (HPV, TdaP), catch up vaccinations (MMR, hepatitis B, chicken pox, typhoid and hepatitis A) and vaccinations for special situations (influenza, pneumococcal, meningococcal and COVID-19) [52].

Management

- There should be a shared decision making with the adolescent and their parents regarding therapy and follow up [53]. To motivate adherence, the relevance, risks and rewards of the therapy should be highlighted and road blocks, if any should be addressed [54].
- Most of the issues causing mental distress in adolescents can be managed by counselling [43]. During counselling, the pediatrician, should provide accurate scientific information, and consider the cognitive development, psycho-social, financial and spiritual needs of the clients while guiding them through the steps of decision making and behavior change.
- Collaborative care in the form of partnerships with parents, educators, peers, social workers and multi-disciplinary professionals is essential.
- Indications for urgent referral to 'adolescent friendly' mental health professionals are suicidal behavior, severe substance use disorder, psychoses and multiple co-morbidities.

Annual wellness visits: An annual health check-up is recommended for all adolescents to address health concerns and screen for medical disorders [55,56] (**Box IV**).

Inpatient care: Adolescent wards in all hospitals should provide uniform adolescent preventive and curative services as outlined above. A separate ward for boys and girls should be allocated for admitting adolescents from 10 to 18 years.

Box III Components of Anticipatory Guidance

- Information on normal development, nutrition, physical activity, sleep
- Study skills
- Immunization
- Hygiene, handwashing technique and dental care
- Menstrual hygiene
- Injury prevention
- Handling peer pressure and bullying
- Media literacy and addiction, cyber bullying.
- Responsible sexual behavior and safe sexual practices
- Substance use prevention
- Parental guidance
- Life skills
- Important laws e.g., POCSO, cyber laws, Narcotics Drugs Psychotropic Substances Act, Juvenile Justice Act

The wards should be located in the department of pediatrics, and the patient care and medical protocol should be coordinated by pediatricians. All healthcare professionals working in these wards including the doctors from different specialties, trainee doctors, nurses, laboratory and *X*-ray technicians, ward boys, helpers, etc. should undergo training to provide adolescent friendly healthcare.

Expanded AFHS

Expanded AFHS means extending the scope of care beyond the pediatric facility. AFHS can be specialized and expanded according to the medical specialty providing healthcare (e.g., gynecology, pediatric surgery) or related to the site of delivery of services (e.g., schools, community centers, telehealth).

Specialty care: Each pediatric specialty (e.g., pediatric surgery, ophthalmology, endocrinology, etc.) must be enabled and empowered to have access to basic training and protocols to assess adolescent relevant issues. Every adolescent seen in outpatient or in inpatient care must be seen by a pediatrician. The key 'friendly' components of AFHS must be followed in all specialty areas. Each specialty should have networking and partnership with the AFHS in the hospital and in the community. Specialty clinics (e.g. gynecology, dermatology, pulmonology, endocrinology, nephrology) could be conducted for adolescents on a weekly or biweekly basis to enable multidisciplinary care at the existing adolescent clinic in the hospital.

Extended delivery of adolescent services: According to the Lancet Commission on Adolescent Health and Wellbeing, opportunities exist for AFHS to be delivered across various platforms (**Web Table I**) [20]. AFHS could be established at schools, communities' health centers, m-health, media and social marketing, and through structural actions [57,58] Pediatricians should partner with these interdependent platforms and advocate for quality care at all levels.

Some strategies for advocacy related to AFHS are detailed in **Web box II**.

CONCLUSION

The implementation of the guidelines shall meet the need of integrated, accessible, equitable, effective and quality healthcare for adolescents (**Box V**). To provide adequate adolescent care, pediatricians, need to adopt appropriate AFHS measures and modify the existing pediatric facility. They should take care to include adolescents, healthcare professionals, community and the government in planning the services. Benchmarking of services should be done at regular intervals. A change in medical curriculum, reframing of current laws, conducting need-based research, and AFHS innovations on the digital platform is likely to revolutionize adolescent healthcare in the future.

Contributors: All the authors and committee members made important intellectual contribution to the guideline document, and have approved the final manuscript. *Funding*: None; *Competing interest*: None stated.

Note: Additional material related to this article is available at *www.indianpediatrics.net*

REFERENCES

1. Adolescent Health Division, Ministry of Health and Family Welfare Government of India. Strategy Handbook. Rashtriya Kishor Swasthya Karyakram. Government of India; 2014.
2. World Health Organisation. Adolescent health. Accessed December 18, 2021. Available from: *https://www.who.int/health-topics/adolescent-health#tab=tab_1*
3. World Health Organisation. Global standards for quality health-care services for adolescents: a guide to implement a standards-

Box IV Components of Annual Wellness Visits

Screening for psycho social stressors, high risk behavior, mental disorders, immunization status

HEEADSSS psychosocial history

Screening questionnaires: Patient Health Questionnaire-2 (PHQ-2), Screening for Childhood Anxiety Related Emotional Disorders (SCARED), Screening to Behavior Intervention (S2BI), Ask Suicide- Screening Questionnaire (ASQ)

Immunization history

Physical examination

Weight, height, body mass index (BMI), blood pressure, visual acuity, dental and systemic examination

Anticipatory guidance for adolescents and parents

See box III

Laboratory investigation

- Hemoglobin
- In sexually active adolescents – annual screening for HIV and Syphilis. First void urine for leucocytes in boys (screening test for sexually transmitted infections) and swab for gram stain/culture/KOH wet mount for girls.
- Oral glucose tolerance test, and lipid profile if obese and/or family history of a death in a first degree relative due to a cardiovascular event at <55 years of age

HEEADSSS: home, education/employment, eating, activities, drugs, sexuality, suicide/depression, and safety.

Box V Summary: IAP Consensus Guidelines for Adolescent Friendly Health Services

1. *Age of adolescence and pediatric care*: Adolescent healthcare from 10 to 18 years of age should be under the purview of the pediatrician
2. *Transition to adult care*: The transition should be preferably ensured by 18 years of age. It should be conducted in a planned and phased manner.
3. *Basic AFHS*: All pediatric facilities should provide adolescent responsive care, be aware about laws regarding consent and confidentiality, conduct a one on one HEEADSSS psychosocial interview, screen and manage common adolescent health problems, impart anticipatory guidance, do need based counselling for parents and adolescents and foster a multidisciplinary adolescent friendly referral network.
4. *Expanded AFHS*: Based on their experience and expertise, pediatricians should consider setting up multispecialty and multisite adolescent friendly services by partnering and collaborating with other health professionals, adolescents, caregivers and the community.
5. *Advocacy*: Every pediatrician should be an advocate for AFHS. They should implement the guidelines in clinical practice and widely disseminate these amongst health professionals.

driven approach to improve the quality of health care services for adole-scents. Volume 1: Standards and criteria. Geneva: World Health Organization; 2015.

4. John TJ. IAP policy on age of children for pediatric care. Indian Pediatr. 1999; 36:461-3.
5. Shastri D. Respectful adolescent care - A must know concept. Indian Pediatr.2019;56:909-10.
6. Sreekumar S, Ramakrishnan J, Harisankar D, Mannethodi K. Felt needs and expectations of adolescents regarding sexual and reproductive health from schools and health systems: A descriptive study. Indian J Sex Transm Dis AIDS. 2019;40:30-34.
7. Santhya KG, Prakash R, Jejeebhoy SJ, Singh SK, et al. Accessing adolescent friendly health clinics in India: The perspectives of adolescents and youth. Population council; 2014.
8. Kumar T, Pal P, Kaur P. Health seeking behavior and health awareness among rural and urban adolescents in Dehradun District, Uttarakhand, India. Int J Adolesc Med Health. 2017;29(2):/j/ijamh.2017.29.issue-2/ijamh-2015-0046/ijamh-2015-0046.xml. doi: 10.1515/ijamh-2015-0046
9. Mahalakshmy T, Premarajan KC, Soundappan K, et al. A Mixed methods evaluation of adolescent friendly health clinic under National Adolescent Health Program, Puducherry, India. Indian J Pediatr. 2019 ;86:132-9.
10. Sivagurunathan C, Umadevi R, Rama R, Gopalakrishnan S. Adolescent health: Present status and its related programmes in India. Are we in the right direction? J Clin Diagn Res. 2015;9: LE01-6.
11. World Health Organization. Making health services adolescent friendly. Developing national quality standards for adolescent friendly health services. World Health Organization. 2012.
12. Ministry of Health and Family Welfare, Government of India. Implementation Guidelines Rashtriya Kishor Swasthya Karyakram (RKSK). Government of India;2018.
13. Ministry of Health and Family Welfare, Government of India. Implementation Guide on RCH II Adolescent Reproductive Sexual Health Strategy for State and District Programme Managers. Government of India; 2006. Accessed December 18, 2021. Available from: *http://www.searo.who.int/entity/child_ adolescent/topics/adolescent_health/rch_ asrh_ i ndia.pdf*
14. Ministry of Health and Family Welfare Government of India A Strategic Approach to Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCH+A) in India. Government of India; 2013. Accessed December 18, 2021. Available from: *http:/ /nhm.gov.in/images/pdf/ RMNCH +A/RMNCH+A_Strategy.pdf*
15. Ministry of Health and Family Welfare Ministry of Human Resource Development. Government of India. Operational Guidelines on School Health Programme under Ayushman Bharat Health and Wellness Ambassadors partnering to build a stronger future. Government of India; 2018.
16. World Health Organization. Adolescent data. Accessed December 18, 2021. Available from: *https://platform.who.int/ data/maternal-newborn-child-adolescentageing/adolescent-data*
17. Global Accelerated Action for the Health of Adolescents (AA-HA!): guidance to support country implementation.World Health Organization; 2017. Accessed December 18, 2021. Available from: *https://apps.who.int/iris/bitstream/handle/10665/255 415/9789241512343-eng.pdf?sequence=1*
18. World Health Organisation and UNICEF. A Vision for Primary Health Care in the 21st Century. Towards universal health coverage and the sustainable development goals. Almaty: World Health Organization and UNICEF; 2018.
19. Sawyer SM, Azzopardi PS, Wickremarathne D, Patton GC. The age of adolescence. Lancet Child Adolesc Health. 2018;2:223-28.
20. Patton GC, Sawyer SM, Santelli JS, et al. Our future: A Lancet commission on adolescent health and wellbeing. Lancet. 2016;387: 2423-78.
21. Patton GC, Olsson CA, Skirbekk V, et al. Adolescence and the next generation. Nature. 2018;554:458-66.
22. Hardin AP, Hackell JM, AAP committee on practice and ambulatory medicine. Age Limit of Pediatrics. Pediatrics. 2017; 140:e2017215117.
23. Sacks D; Canadian Pediatric Society. Age limits and adolescents. Paediatr Child Health. 2003;8:577-78.
24. Sawyer SM, McNeil R, Francis KL, et al. The age of pediatrics. Lancet Child Adolesc Health. 2019;3:822-30.
25. Carrizosa J, An I, Appleton R, et al. Models of transition clinics. Epilepsia. 2014;55:46-51.
26. Schmidt A, Ilango SM, McManus MA, et al. Outcomes of pediatric to adult health care transition interventions: An updated systematic review. J Pediatr Nurs. 2020;51:92-107.
27. Verma A, Sahay S. Healthcare needs and programmatic gaps in transition from pediatric to adult care of vertically transmitted HIV infected adolescents in India. PLoS One. 2019;14: e0224490.
28. Menon J, Peter AM, Nayar L, Kannankulangara A. Need and feasibility of a transition clinic for adolescents with chronic illness: A qualitative study. Indian J Pediatr. 2020;87:421-26.
29. World Health Organisation. Country Profile: India. Accessed December 18, 2021. Available from: *https://platform.who.int/ data/maternal-newborn-child-adolescentageing/static-visuali zations/adolescent-country-profile*
30. International Institute for Population Sciences (IIPS) and ICF. National Family Health Survey (NFHS-4), 2015-16: India. IIPS. Accessed Dec 18, 2021. Available from: *http://rchiips.org/*

NFHS/NFHS-4Reports/India.pdf
31. Sharma SK, Vishwakarma D. Transitions in adolescent boys and young men's high risk sexual behavior in India. BMC Public Health.2020;20:1089-103.
32. Sethi V, Lahiri A, Bhanot A, et al. Adolescents, Diets and nutrition: Growing well in a Changing World, The Comprehensive national nutrition survey, Thematic Reports, Issue 1, 2019.
33. United Nations Children's Fund. The State of the World's Children 2021: On my mind – promoting, protecting and caring for children's mental health. UNICEF, 2021.
34. Davey S, Davey A. Assessment of smartphone addiction in Indian adolescents: A mixed method study by systematic-review and meta-analysis approach. Int J Prev Med. 2014; 5:1500-11.
35. United Nations. Convention on the Rights of the Child. UNGA resolution 44/25. United Nations; 1989
36. The Juvenile Justice Act 2015. Accessed December 18, 2021. Available from: *http://cara.nic.in/PDF/JJ%20act%202015.pdf*
37. The Protection of Children from Sexual Offences Act 2012. Accessed December 18, 2021. Available from: *https://wcd.nic.in/sites/default/files/POCSO%20Act%2C%202012.pdf*
38. Ministry of Health and Family Welfare, Government of India. Child Health Screening and Early Intervention Services National Rural Health Mission. Government of India; 2013. Accessed Dec 18, 2021. Available from: *http://nhm.gov.in/images/pdf/programmes/RBSK/Resource_Documents/RBSK%20Resource%20Material.pdf*
39. Bhave S editor. Bhave's Textbook of Adolescent Medicine. PeePee Publishers, 2016.
40. Bert F, Camussi E, Gili R, et al. Transitional care: A new model of care from young age to adulthood. Health Policy. 2020;124:1121-28.
41. White PH, Cooley WC; Transitions Clinical Report Authoring Group; American Academy of Pediatrics; American Academy of Family Physicians; American College of Physicians. Supporting the Health Care Transition from Adolescence to Adulthood in the Medical Home. Pediatrics. 2018;142: e20182587.
42. Bali S, Yadav K, Alok Y. A study of physical infrastructure and preparedness of Public Health Institution for providing adolescent friendly health services in Central India. Ind J Prev Soc Med. 2020;51:195-203.
43. Ministry of Health and Family Welfare, Government of India.Training Module for Orientation Program for Medical Officers on Adolescent Friendly Health Services under Rashtriya Kishor Swasthya Karyakram. Government of India; 2015.
44. Russell PS, Basker M, Russell S, et al. Comparison of a self-rated and clinician rated measure for identifying depression among adole-scents in a primary-care setting. Indian J Pediatr. 2012;79: S45-51.
45. Russell PS, Nair MKC. Rationale and study design for anxiety disorders among adolescents in a rural community population in India. Indian J Pediatr. 2013;80:S132-8.
46. Demaso DR, Walter HJ, Wharff EA. Suicide and attempted suicide. *In:* Kleigman RM, Geme JS, editors. Nelson Textbook of Paediatrics. 21st ed, Elsevier; 2019.p.159-62.
47. Levy S, Weitzman ER, Marin AC, et al. Sensitivity and specificity of S2BI for identifying alcohol and cannabis use disorders among adolescents presenting for primary care. Subst Abus. 2021;42:388-395.
48. Nair MKC, Chacko D, Rajaraman V, et al. The diagnostic accuracy and validity of the teen screen questionnaire-mental health for clinical and epidemiological studies in primary-care settings. Indian J Psychol Med. 2014;36:187-91.
49. Ambresin AE, Bennett K, Patton GC, et al. Assessment of youth-friendly health care: a systematic review of indicators drawn from young people's perspectives. J Adolesc Health. 2013;52: 670-81.
50. World Health Organisation. Global standards for quality health-care services for adolescents: guide to implement a standards-driven approach to improve the quality of health care services for adolescents. Vol. 2: Implementation guide. WHO; 2016.
51. Klein M, Goldenring JM, Adelman W. HEEADSSS 3.0: The psychosocial interview for adolescents updated for a new century fuelled by media.Contemp Pediatr. 2014 Accessed December 18, 2021. Available from: *https://www.contemporarypediatrics.com/view/heeadsss-30-psychosocial-interviewadolescents-updated-new-century-fueled-media*
52. Kasi SG, Shivananda S, Marathe S, et al. Indian Academy of Pediatrics (IAP) Advisory Committee on Vaccines and Immunization Practices (ACVIP): Recommended Immunization Schedule (2020-21) and Update on Immunization for Children Aged 0 Through 18 Years. Indian Pediatr. 2021; 58:44-53
53. World Health Organisation. Assessing and supporting adolescents' capacity for autonomous decision-making in healthcare settings: a tool for health-care providers. World Health Organization; 2021.
54. Miller WR, Rollnick S. Motivational interviewing: helping people change. 3rd edition. Guilford Press; 2013.
55. Hagan J, Shaw J, Duncan P, editors. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents: Pocket Guide. 4th ed. American Academy of Pediatrics; 2017.
56. Webb MJ, Kauer SD, Ozer EM, et al. Does screening for and intervening with multiple health compromising behaviors and mental health disorders amongst young people attending primary care improve health outcomes? BMC Fam Pract. 2016;17:104.
57. Sawyer SM, Reavley N, Bonell C, et al. Platforms for Delivering Adolescent Health Actions. *In*: Bundy DAP, Silva Nd, Horton S, et al., editors. Child and Adolescent Health and Development. 3rd edition. The World Bank; 2017.
58. Galagali PM, Brooks MJ. Psychological care in low-resource settings for adolescents. Clin Child Psychol Psychiatry. 2020; 25:698-711.

ANNEXURE

IAP Guidelines Committee on Adolescent Friendly Health Services

Chairpersons: MKC Nair, Digant D Shastri; ***Convener***: Preeti M Galagali; ***Writing Committee Members***: Shilpa Chandra-shekaraiah, Chitra Dinakar, Preeti M Galagali, Piyush Gupta, Jayashree Kanthila, Chandrika Rao, Dheeraj Shah; ***Members***: Harmesh Bains, CP Bansal, Poonam Bhatia, Swati Y Bhave, Sukanta Chaterjee, JC Garg, Atul Kanikar, Sonia Kanitkar, Latha Ravichandran,, MN Venkiteswaran; ***Rapporteur***: Kritika Agarwal; **Ex-officio**: Remesh Kumar. (*All members attended the National Consultative Meet at Bengaluru on 16 August, 2019 except CPB and S Chaterjee*).

Web Box I Screening Tools for Common Mental Disorders

Depression screening

Patient Health Questionnaire-2 (PHQ-2): *https://aidsetc.org/sites/default/files/resources_files/PHQ-2_English.pdf*

Becks Depression Inventory (BDI): *https://www.ismanet.org/doctoryourspirit/pdfs/Beck-Depression-Inventory-BDI.pdf*

Patient Health Questionnaire-9: Modified for teens (PHQ-9): *https://www.aacap.org/App_Themes/AACAP/docs/member_resources/toolbox_for_clinical_practice_and_outcomes/symptoms/GLAD-PC_PHQ-9.pdf*

Anxiety disorder screening

Screen for Child Anxiety Related Emotional Disorders (SCARED): *https://www.ohsu.edu/sites/default/files/2019-06/SCARED-form-Parent-and-Child-version.pdf*

Substance use disorder screening

Screening to brief intervention tool (S2BI): *https://www.drugabuse.gov/ast/s2bi/#/*

Suicide screening

Adolescent Suicide- Screening Questionnaire (ASQ): *https://www.nimh.nih.gov/research/research-conducted-at-nimh/asq-toolkit-materials/asq-tool/asq-screening-tool*

<table>
<tr><th colspan="2">Web Box II IAP Advocacy – Strategies for AFHS</th></tr>
<tr><td>1.Dissemination of guidelines to all IAP members and share with other professional organizations like Indian Medical Association, Federation of Obstetrics and Gynecology Institutions and Community Medicine.</td><td>5. Suggest to government to approve extension of adolescent healthcare up to 18 years under the purview of pediatricians with universal implementation. Extending the adolescent age up to 24 years to be considered as per existing global practice.</td></tr>
<tr><td>2. Conduct training workshops for pediatricians, allied health professionals, parents, teachers and adolescents in AFHS.</td><td rowspan="2">6. Emphasize on the need to review certain laws e.g., POCSO and laws regarding consent and confidentiality, especially for married and sexually active adolescents to enable access to health services without legal liabilities. Rigorous enforcement of the Motor Vehicle Act, Narcotic Drugs Psychotropic Act and laws for nutrient labelling of packaged food items. Stronger laws for online safety and to restrict the access of minors to pornography and online child sexual abuse material .A change in the nature of laws from being punitive to more reformatory is recommended.</td></tr>
<tr><td>3. Ensure that AFHS is an integral part of the department of pediatrics at all medical colleges, hospitals and private healthcare establishments. Update the IAP adolescent health card. Encourage research on various adolescent health issues</td></tr>
<tr><td>4. Suggest to NMC to include hospital and community based AFHS skill training sessions with emphasis on mental health evaluation, digital wellness, counselling, trauma informed care and planning transition to adult care in undergraduate and postgraduate curriculum. Evaluation of medical trainees to include the above. Strive for NMC approved fellowships and a super specialty course in adolescent health.</td><td>7. IAP should have a public private partnership with the government to strengthen RKSK and AFHS. Telehealth, tele-counselling, m-Health and digital health services should be integrated into AFHS and RKSK with active participation of all stakeholders including adolescents in its design.</td></tr>
</table>

Web Table I Expanded Adolescent Friendly Health Services

Health care Domains Addressed	*Expanded Action Plan at various levels*				
	Health services	*Schools*	*Communities*	*Mobile health*	*Media and social marketing*
Sexual and reproductive health, including HIV/AIDS	Early diagnosis and treatment of HIV/AIDS and STDs Antenatal, delivery, postnatal care, condoms, contraceptives Transition to adult care for HIV/AIDS Centres to handle POCSO cases	Comprehensive sexuality education Safe schools with clean toilets and facilities for menstrual care Peer-led interventions Teen clubs	Positive youth development Peer education Teen clubs	Targeting of knowledge, attitudes, and risk behaviors Promote knowledge of prevention of sexual abuse	Promotion of community support for sexual and reproductive health and HIV/AIDS health access
Malnutrition (under and over nutrition, micronutrient deficiencies)	Screening and micronutrient supplementation Management of co-morbidities	Micronutrient supplements Healthy school meals, physical activity	Micronutrient and protein-energy supplements De-worming Nutrition education	Interactive personalized feedback	Junk food advertising restrictions Campaigns to build community awareness
Vaccine-preventable and infectious diseases	Early identification and treatment Vaccinations De-worming Bed net distribution	Vaccinations De-worming	De-worming Bed net distribution	Vaccine reminders via SMS	Campaigns to build community awareness
Injury and violence	Trauma care, including first responders (ambulances) Screening for mental disorders	Multi component interventions targeting violent behavior and substance use	Promotion of parental skills, communication, gender equality Economic empowerment Police enforcement of traffic rules		Promotion of knowledge of the effects of violence and available services
Tobacco, alcohol, and illicit drugs	Risk screening Motivational interviewing to promote cessation	Alcohol and smoke-free policies Parent and teacher training and monitoring groups.	Promotion of positive parenting skills Mentoring	Targeting of knowledge, attitudes, and risk behaviours Text messaging to encourage quitting	Promotion of adolescent mental health literacy
Mental disorders, including suicide	Practitioner training for management Routine assessment of mental health, including suicide risk	Educational interventions Gatekeeper training Mental health services and life skills education	Gatekeeper training	Suicide and psychosocial wellness help lines.	Promotion of adolescent mental health literacy
Chronic physical disorders	Management of condition Promotion of self-management and transition to adult health care	School-based health services	Peer support initiatives	Monitoring control and providing guidance regarding management	
Structural Actions	Legislation, taxation, and implementation of policies are essential structural actions to improve adolescent health. Indeed, for many health risks, such as tobacco and alcohol, road traffic injuries, violence, unsafe work, and obesity, structural actions are the most effective interventions for adolescent health				

Prepared from material available in the references 10,67-69