

# Adolescent Health Voyage in Nigeria: Surviving the Storm Through a Primary Health Care Network with Family Physicians in the Lead

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**Abstract:** The adolescence is a period of transition from childhood to adulthood. Globally, adolescent population is increasing due to successes in child survival strategies especially in low- and middle- income countries (LMICs) including Nigeria. In Nigeria, adolescents constitute about 22% of the total population and it is projected to reach 28% in 2040. Despite this fact, in developing health policies and services by government, the adolescents are largely ignored. The age bracket is characterized by unhealthy risk-taking behaviors which affect their health negatively. Such behaviors may cause injuries, risk of infectious diseases including HIV/AIDS, teenage pregnancy/possible complications, and violence. The aim of this study was to examine the health services available in Nigeria for the increasing health needs for the rising adolescent population. The existing literature was reviewed, seeking to establish available network of care and support for adolescent population in Nigeria. Although the National government recognized that addressing the health needs of adolescent and young people is vital to nation's building, the services of available service providers are poorly coordinated thus leading to poor outcomes. This review concludes that there is an urgent need for proper coordination of adolescent health- related care provider activities for better outcome. Family physicians in Nigeria through the Society of Family Physicians of Nigeria (SOFPON) should spearhead collaborative efforts with organizations working in the Adolescent Health space in order to achieve desired results.

**Keywords:** Adolescent, Health, Nigeria, Primary Health Care, Family Physicians

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## 1. Introduction

Adolescence has been defined as a period in life when transition from childhood to adulthood occurs, and it is characterized by physical, psychological, social, and emotional changes [1]. Furthermore, adolescence constitutes a period for taking risk, and when unhealthy behaviors affect health not only in the period but also in later life. Although, adolescence is regarded as a time of contradictions, it is known to be the healthiest phase in life (in consideration of psychological parameters), and during which a third of the

entire disease burden in adulthood has its foundation laid [2]. Moreover, expanding evidence reflect that adolescence forms a dynamic period of health knowledge and adaptation to aimed at health interventions, in order for adolescents to improve their well-being through making positive lifestyle choices [3]. This article aims to disseminate information on the role that Family physicians are playing using evidence-based resources both internationally and locally to open the floor for an ongoing initiative of framework, called *ADOLNET-PHC* by the *ADOLESCENT HEALTH PHYSICIANS' NETWORK NIGERIA* for establishing a network for consolidating, sustaining, and expanding

Adolescent health care services from within the clinical perimeters to the larger society in Nigeria with Family Physicians in the lead.

## 2. Global Burden of Adolescent Health Issues

With the successes recorded in child survival strategies in recent past decades, a substantial rise among adolescent population has been observed mainly in the low- and middle-income countries (LMICs) [4]. Approximately 1.3 billion adolescents exist in the world as at April, 2022, composing about 16% of the total global population with 90% living in LMICs [5, 6]. There is expectation that the proportion of adolescents worldwide, especially in Africa, will increase dramatically from 18% from year 2012 to 28% by year 2040 while other age groups will decline worldwide [6]. An unsatisfactory rate of death among adolescents, estimated at 1.3 million in 2012, with more than two-thirds occurring in Africa and Southeast Asia [7]. Unintentional injuries in the form of drowning road traffic accidents remain the topmost causes of mortality in adolescents, while other significant causes include infectious diseases, teenage pregnancy complications, violence, and suicide [7]. Globally, it is estimated that approximately 330 adolescents die daily from road traffic injuries, and 180 adolescents from interpersonal violence [8]. In the female category, those adolescents aged 15 to 19 years experienced pregnancy-related deaths as the second foremost causes of death following self-harm, while RTA and interpersonal violence lead among males within the same age class [9].

## 3. Burden of Adolescent Health Issues in Nigeria

Adolescents form an integral part of any society. One in six of the world's population is an adolescent and nine out of ten of them live in low and middle-income countries (LMICs) [10]. Adolescents constitute about 22% of Nigeria's population [10]. According to the United Nations statistics, the probability of dying among the adolescent population is highest in sub-Saharan Africa, Oceania, Northern Africa, and Southern Asia [11]. Regarding Adolescent health and well-being, the Lancet Commission has classified Nigeria as a multi-burden country based on a high burden of poverty-related diseases such as infectious diseases, nutritional deficiency, and sexual and reproductive health [12].

There are several factors associated with the health status of adolescents in Nigeria. The factors have led to significant variations in the health status of the different groups of adolescents. The health variations and inequalities are largely driven by health determinants including socioeconomic inequity, education, gender and social norms, parental responsibilities, family-related factors, health knowledge and literacy, and access/utilization of health services [12]. The physical, emotional, and social environments in which

adolescents live significantly influence their health [11].

Globally, health policies and services have largely ignored adolescents. An estimated 1.2 million adolescents die annually, mainly from preventable causes [11]. Studies have shown that many health conditions have their roots in adolescence [11, 13]. About half of all mental health disorders in adulthood have their onset in adolescence [13]. However, most of these cases are often overlooked by health providers, parents, and adolescents, leading to several undetected and untreated cases. Mental health issues account for about 16% of the global burden of diseases in adolescence. Depression is one of the leading causes of adolescent health burden, while suicide is a major cause of death among adolescents [13]. These mental health issues are prevalent in LMICs due to civil conflicts, poverty, and other social vices [14]. Alcohol and substance use are also of major concern in adolescence. It is largely responsible for violence, injuries, mental disorders, and premature deaths among adolescents [13].

During adolescence, unintentional injuries constitute a leading cause of disability and death with high disability-adjusted life years (DALY) [12, 13]. The risk of interpersonal and sexual violence is increased in adolescence leading to behavioral disorders, educational challenges, mental health problems, and sexually transmitted infections, including HIV. Nigeria has the second largest HIV/AIDS burden in the world after South Africa [13, 15]. The national data in Nigeria suggests that about 40% of all reported new cases of HIV occur in young persons aged 15 – 24 years, accounting for the highest compared to other age groups [15]. Other communicable diseases also contribute significantly to the burden of adolescent health issues, including lower respiratory tract infections and diarrheal diseases. Physical disorders and chronic diseases such as undernutrition and obesity, oral health problems, sickle cell diseases, and asthma also contribute to the burden of health issues among adolescents [12, 13].

Sexual and reproductive health issues among adolescents are another major burden. Adolescents are especially vulnerable to complications of unsafe abortion and pregnancy [10, 13]. This vulnerability is accentuated by their poor access to sexual/reproductive health services including barriers to utilization of these services such as individual, social, and health system barriers [12, 16]. In addition, adolescents living with disabilities have specific health needs and a higher level of vulnerability [10]. The COVID-19 pandemic also contributed to the health burden of adolescents through an increased incidence of low health-related quality of life (HRQOL) reported by adolescents [17].

The overall leading health issues among adolescents in Nigeria are sexual and reproductive health problems, mental health disorders, alcohol/substance use disorders, nutritional problems, and violence and injuries [12]. There is a need to address the factors that influence these health issues among adolescents. Therefore, despite the various structures in existence to solve the problems of Adolescent health in Nigeria, there is obviously a great burden constituting a

dilemma in the country. The burden of Adolescent Health in Nigeria therefore indicates the utmost need for an enhanced framework for addressing the issues.

#### 4. Global Strategy for Adolescent Health

The Sustainable Development Goal 3 aims to “ensure healthy lives and promote well-being for all at all ages”. The concepts of well-being and health are regarded as core to the stated goal. Thus, adolescents who fall within the ages of 10 to 19 years, are without doubt part of the ‘all ages’ spectrum. The Global Strategy by the United Nations on Women, Children and Adolescent Health (2016-2030) intends to “ensure health and wellbeing for every woman, child, and adolescent” within the framework of the SDG identifies that adolescents will be core to the entire success of the strategy [18]. The strategy has highlighted further participation frameworks over a wide array of issues relevant to adolescents and young people such as infections, risks of non-communicable diseases, women’s health, obesity, and nutrition [18, 19]. Furthermore, the World Health Organization (WHO) and United Nations Children Fund (UNICEF) Lancet Commission requests that children less than 18 years of age be at the focus of the SDGs [20].

#### 5. The Adolescent Health Strategy in Nigeria

The Federal Government of Nigeria recognized that addressing the health needs of adolescents and young people is a vital commitment to nation building and positive step towards her socio-political and economic well-being [21, 22]. Hence, it inaugurated and recently renewed policies for the adolescent health and development. These policies with different strategies are set to reduce the vulnerability of adolescents, by providing the framework and the integrated multi-sectorial approach for stakeholders’ response to adolescents’ right to health, education, sexual and reproductive health [21, 22]. The policies, which are in all holistic, recognized eight key areas for programming, namely: Sexual Behavior, Reproductive Health, Nutrition, Accidents, Drug Abuse, Education, Career, Employment, Parental Responsibilities, and Social Adjustments. The strategies to achieve these policies include: (1) Advocacy and resource mobilization, (2) Education and program implementation (3) Career and employment (4) Provision of access to a comprehensive range of adolescent/youth-friendly information (5) Spirituality counseling and health care services, including social adjustment and parental school health services (6) Provision of healthy, safe and supportive responsibilities and environment for young people. (7) Health promotion and behavior change communication (BCC) to foster the adoption of healthy behavior and enable young people to take greater control over and improve their health and capacity building for young people, including life and livelihood skills, to maximize their development (8) Capacity

building for healthcare workers, teachers and other stakeholders dealing with young people (9) Partnership development and coordination within the health sector and other sectors (10) Research activities to provide evidence-based platform for programs and more policies. Monitoring and evaluation of these strategies and policy implementation were all captured [21-23].

The overall strategic support and drive for the execution of these policies are provided for by the Federal Ministry of Health (FMOH), and it occupies a leading role with regard to the activities. The FMOH plays advocacy for increased government participation. It also oversees the budgetary implications of each program and hence supervises and compliments the State Ministries of Health (SMOH) which provide leadership for the implementation of the strategies within the states. The SMOH further integrate the adolescent and youth-friendly services into the different primary health care, primary and secondary schools, social welfare and all other relevant programs within the Local Government Area (LGA) authorities [24]. Nevertheless, poor funding from the government is still a major challenge, which has resulted to the poor uptake of these strategies and by extension poor availability of the services to the adolescent and young people of the country [24, 25].

#### 6. Adolescent Health Initiatives and Organizations in Nigeria

There are various adolescent health initiatives and organizations in Nigeria, including inter-governmental organizations, governmental agencies, and non-governmental organizations. There seems to be no uniformity and their programs which are mostly polarized to different settings, and mostly excluding clinicians in their approach. The organizations are mostly interested in programs that are of necessity to them, and which may not reflect the needs of the adolescent populations in specific environment. The notable organizations and initiatives are as follows:

- 1) The World Health Organization (WHO), which in 2021 announced its continued pledge for supporting adolescent health care in Nigeria. The WHO program targets on using the guidelines- and recommendations-focused approach with the program to advise the government on the problem.
- 2) The United States Agency for International Development (USAID) came up with a proposed five-year (2020 – 2025) program named “YPE4AH” also known as the “Shine Well Well” program to enhance the health care of adolescents who are “out-of-school” which is a priority to the organization. The USAID program intends to use evidence-based guidelines and benchmarks for promoting adolescent health in Nigeria. The program aimed to collaborate with the national government and other adolescent-focused organizations such as “Youth Empowerment and Development Initiative”, and the “Women Friendly

Initiative” in order to solve the adolescent health problems in the country [26].

- 3) The Society for Adolescent and Young People’s Health in Nigeria (SAYPHIN) is the national association of professionals working in the adolescent and young people’s health in Nigeria, including health professionals, social workers, counseling and educational professionals (SAYPHIN, 2022; <https://www.sayphin.org>).
- 4) Centre for Adolescent Health and Social Development (CAHSD) is non-governmental organization (NGO) focusing on extending the adolescent health education and information within the public. The center has branches in Lagos and Abuja with coordinators in many states. They are mainly non-physicians conducting outreaches to underserved communities where adolescents exist (CAHSD, 2022; <https://www.cahsd.org.ng>).
- 5) Adolescent Health Support Organization (AHSO) was newly found and registered with volunteers. It has her branch in Ilorin, Kwara state. Information on roles and responsibilities were not available.
- 6) Adolescent Health and Information Projects (AHIP) is a youth-focused non-governmental organization established in 1989 as a youth club, and commenced program implementation in 1989. Its main focus areas are health, social and economic issues related to young people and women (AHIP, 2022; [www.ahipnig.org](http://www.ahipnig.org)).
- 7) Lluvia Health, a child and adolescent health non-governmental organization, focusing on social enterprise driven by the mandate to enhance pediatric and adolescent health service delivery. It is located in Lagos (Lluvia Health, 2022; <https://www.lluviahealth.org>).
- 8) The National Association for the Promotion of Adolescent Health and Development (NAPAH) is an organization for all youth serving NGOs on health and development. It is the Nigerian chapter of the African Association for the Promotion of Adolescent Health (AAPAH) formed in Kenya in 1992 (NAPAH, 2022; The Communication Initiative Network; <https://www.comminet.com>).
- 9) Youth Development and Empowerment Initiative (YEDI) is an adolescent health organization working to promote the health and wellbeing of adolescents and their communities in Nigeria (YEDI, 2022; <https://urbanet.info>).
- 10) Adolescent and Youth Sexual and Reproductive Health (ARFH) aims to lower the rate of child trafficking, early marriage, teenage pregnancy, forced marriage, unsafe abortion, drug and substance abuse etc. (ARFH, 2022; <https://arfh-ng.org>).
- 11) Society for Family Health Nigeria (SFH) also conduct programs focused on adolescents (SFH, 2022; <https://sfhnigeria.org>).
- 12) Grassroots Health Organization of Nigeria (GHON) seeks to empower and create opportunities for youth

and women through education, sexual and reproductive health information and services, and poverty alleviation activities.

- 13) Action Health Incorporated (AHI), based in Lagos, focuses on adolescent health and development.

## 7. Attaining the Adolescent Health Goal

Worldwide, there is a growing evidence that adolescent medicine knowledge among health professionals enhances their clinical performance [27]. However, there exists a knowledge gap among the clinicians as their education needs stays unmet despite the interest in upgrading their skills in the discipline. Certain suggestions were made by the WHO Health Report for Adolescents that attaining progress in universal health coverage targeting adolescents will need renewed interest in educating healthcare providers [7]. The steps for accomplishing the goal were proposed as follows:

- 1) Establishing competency-based education in Adolescent Health and Medicine forms a core prerequisite within both undergraduate and postgraduate curricula.
- 2) Creating competency-based educational programs highlighting the developmental and contextual components of adolescent health.
- 3) Making policies and strategic plans that promote the supervision of primary care physicians and specialists in providing care to adolescents [7].

## 8. Barriers to Adolescent Health Care

Many barriers are experienced by adolescents in accessing healthcare as suggested by evidence as described as follows:

- 1) Adolescents do not possess sufficient health literacy needed to gain access to, understand and apply information obtained for promoting and maintaining good health for them.
- 2) The use of health services by adolescents could be greatly influenced by social values and peer attitudes (perceived or real), parents, and other adult gatekeepers such as clinicians.
- 3) Significant causes of morbidity and mortality among adolescents, and their risk factors, are not attracting adequate attention within primary health care and other “adolescent-friendly” initiatives, which usually target narrow range of problems like sexual and reproductive health.
- 4) Many adolescent issues like poor nutrition, mental health disorders, injuries, substance abuse, and chronic diseases, are habitually neglected. Health services are mostly clinically-oriented, while prevention measures are often overlooked.
- 5) Adolescents often do not view themselves welcome into the core primary health care services due to perceived lack of confidentiality and privacy, fear of stigma, lack of respect, stigmatization, discrimination, and imposition of certain moral values.
- 6) Flexible appointment periods and needed consultation

without appointment are not readily available to adolescents who demand for them.

- 7) Some vulnerable categories of adolescents in community setting can fall outside the perimeters of service delivery due to less visibility or social marginalization/stigmatization. Moreover, out-of-pocket payment modality has a negative effect on accessing health by adolescents who are mostly dependent on family resources [28].

## 9. Proposed and Current Innovative Steps by Family Physicians in Nigeria

An initiative by Family physicians in Nigeria has commenced to establish a framework known as *ADOLNET-PHC*. It is comprised of Family physicians in health institutions with working in Adolescent Health/Medicine, who are to coordinate and champion collaboration with primary health centers. The network will be promoting adolescent health programs from the clinical and public health perspective, and partner with organizations available in their respective states and LGAs in the country, in order to establish a robust, focused, and sustainable framework, being led by Family physicians. It is hoped that the network would expand and extend its tentacles to all physicians working to support adolescent health, such as Public health physicians, Pediatricians, Internal physicians, Gynecologists, etc. The proposed extended network of physicians is termed *ADOLESCENT PHYSICIANS' NETWORK NIGERIA*.

Applying the World Health Organization's 8-point Global Standard Framework [29], the activities to be conducted under *ADOLNET-PHC* are described as follows:

### 1) Standard 1: Adolescents' health literacy

Increasing the awareness of adolescents regarding Adolescent health, its components, the preventive measures of diseases, lifestyle alterations, and long-term life activities are vital aspects of action plan that needs to be implemented within the primary health care framework. Health education for adolescents needs to be promoted in the primary health care setting, which is a domain of Family Physicians, who manages patients holistically, and thus occupy the strategic status of the ideal physician for the adolescent population. Collaboration with educational institutions, such as western-oriented schools, arabic-focused schools, and vocational-training institutions, for an all-encompassing program that would cover adolescents across virtually the entire sphere of every community. Tertiary health institutions have to establish Adolescent health-focused clinics, apart from only tagging the general clinics as 'adolescent-friendly'. Training of physicians and other health professionals in the discipline would catalyze the journey towards attaining health for adolescents within health facility settings. Incorporating Adolescent Health curriculum into studies for secondary school students who are the ones who constitutes adolescent age group, would help in advancing the transfer of knowledge to the members of the critical age class

themselves.

### 2) Standard 2: Community Support

The communities need to be attentive to the needs of the adolescent population, and be ready to provide them with the necessary support. Various institutions and organizations should establish frameworks and pathways for assisting adolescents to achieve healthy life which would enhance and optimize their potential towards achieving their life goals. The means of community support includes creating and maintaining adolescent-sensitive plans for adolescents within the family structure, promoting adolescent organizations that would educate and activate health and social development activities within professional, religious, and geographical communities. Government agencies and agencies need to incorporate adolescent programs in their strategic plans for the people.

### 3) Standard 3: Appropriate Package of services

Health services that are needed by specific adolescent population in specific setting are expected to be provided by authorities in order to enhance the wellbeing of the adolescents. Young people in secondary schools can will need knowledge on how to prevent injuries during sports events. The young individuals should be aware of high-risk behaviors, and their consequences and how to avoid them. School teachers should constantly monitor students in schools and be able to recognize signs of common medical, psychological, and social issues that can develop among the vulnerable class of people. Sexual and reproductive health practices among adolescents need to be initiated by families according to their cultural and religious tenets, and not to be neglected in its entirety. Mental health of adolescents needs to be closely watched by families, educational institutions, religious affiliates in order to identify early unusual behaviors at places where individuals socialize.

Family Physicians in secondary and tertiary health facilities in each state of the country should be supported and connected to the primary health care facilities through State Primary Healthcare Development Agencies (SPHCDAs) to facilitate collaboration. Primary Health Care (PHC) health workers need to be trained by Family physicians and other Adolescent Health specialists with the tools to be used at the PHCs provided on how to screen adolescents for medical conditions and risk factors. Assessment of substance abuse and behavioral disorders with standardized tools and framework need to be advocated by Family physicians for use by PHC staff, and for PHC workers to know when to refer adolescents in need of specialist care to Adolescent Health clinics in the central tertiary health institutions. Assessment of the risk for injuries, sexually transmitted infections, chronic disorders. The aforementioned plan is important, as most Family physicians work at secondary and tertiary health facilities, and it is generally known that the number of Family physicians available in the country is inadequate to cater for the populace.

### 4) Standard 4: Provider's Competencies

Although, health professionals need to have a basic knowledge of adolescent health as adolescents can seek for

health services at any of the level of health care, advanced knowledge in the discipline by both clinicians and public health leaders would enhance specialized health care for optimizing the wellbeing of the young people. The Adolescent-friendly clinics need to be composed of physicians, nurses, nurse educators, social workers, behavioral physicians, and psychologists, who would skillfully address the issues confronting the adolescents in an acceptable manner. Health professionals should be competent in conducting counseling to avoid substance abuse, extreme sports, bullying, smoking, alcohol, illicit sexual activities, in a collaborative way for the cooperation of the adolescents to be gained. Protecting the privacy and confidentiality of adolescents need to be core in rendering care to them. Provision of information when needed, avoiding discrimination and judgmental attitude, and promoting mutual respect in attending to the young people is influential in encouraging adolescents to seek care when needed without fear.

#### 5) Standard 5: Facility Characteristics

The health care facility where young people seek care should be make clean, attractive, comfortable, spacious, and welcoming for them. The operating hours of the facility should be unrestricted for adolescents who could choose to present at the facilities at periods convenient for them or when crises occur. Audio-visual gadgets that would stimulate young people and keep their mind at rest can be incorporated in the environments where care is to be sought by adolescent age group. It is essential that health professionals are sensitive to the level of education of young people when being engaged in communication to avoid perceived harassment. The physique of adolescents should be respected when they are being approached, and health professional s need to be cognizant of the body of the health care seeker who subconsciously needs respect and consent before being examined, as well as explanation of what his/her body is undergoing regarding physical development changes. Therefore, health providers should be trained to be highly sensitive to the physical and psychological needs of young people and give them support, without bias or condemnation when they seek health care.

#### 6) Standard 6: Equity and Non-discrimination

Fairness and impartiality should be incorporated in the principles guiding the care rendered to adolescents both within and outside clinical settings. They should not be discriminated against and should not be deprived of services required by them irrespective of their socio-economic status. Screening for diseases that they are at risk of needs to be conducted for them when the opportunity arises such as when they present at health facilities for specific symptoms. Health education and counseling on issues peculiar to young people need to be discussed with them when they are seen at clinics. Reaching out to adolescents within their social circles such as schools, religious organizations, social development clubs, and community volunteering associations. They need to be rendered personalized care from health care providers without being judgmental or stigmatized due to their medical

or psychosocial conditions. They need to be guided on the meanings of sexual and reproductive health, substance abuse and its implications, bullying, activities predisposing to injuries, peer group influence, social groups that would impact positively and those that would do otherwise in their specific context. All these vital issues need to be brought to limelight without sidelining adolescents, and ensuring that they are fully engaged and given a voice. They need not be supported due to their youthfulness, immaturity, or financial dependence. The socio-demographic status of an individual adolescent should not determine the standard of care to be provided by the healthcare provider. For instance, being a single girl with genital symptoms does not reflect that the individual is promiscuous or having intended illicit sexual practices. Being a young boy who abuses drugs does not indicate that he is satisfied with the kind of lifestyle he is living. Such victims of drug abuse need to be explored by Family physicians, and other primary health care professionals who can explore the bio-psycho-socio-spiritual wellbeing of the individual in a personalized and supportive manner.

#### 7) Standard 7: Data and Quality Improvement

The Adolescent population needs to be studied closely in areas of need such as pattern of substance abuse in specific geographical locations, pattern of mental illness among young people, chronic diseases that they are at risk, lifestyle forms among adolescents, awareness of safe sexual and reproductive health activities, etc. These would enhance the care being provided by health facilities when they are cognizant with the health issues confronting young people in their localities and nations. Improvement of the quality of services given to adolescents over time enhances their access to the facilities, as well as their interest in seeking for needed care. Data on adolescent issues could be obtained through primary health centers in the country, and collated in a central national database, where it could be utilized in making adolescent-included health policies.

#### 8) Standard 8: Adolescent Participation

The members of the age group themselves need to be engaged through their social structures or platforms such as educational institutions, religious organizations, and social development societies. The benefits of positive lifestyle and social activities should be reinforced to them, while the negative implications of social vices should be taught to them as well. Incorporating Adolescent health into the curriculum of secondary schools would go a long way in improving the lives of the vulnerable age group at the critical transition period of adolescence. Teachers in schools need to be trained in the discipline for them to be active in teaching the young ones on how to initiate positive lifestyle practices into their life for life-long well-being.

## 10. Action – Driven Strategic Plan for the Adolescent Health Voyage

Family physicians in each state of the country need to

establish an Adolescent health group of interested members who need to champion the project of *Surviving the Storm facing Adolescent Health Voyage in Nigeria* in their respective domains. Therefore, Family doctors are championing are a network of Adolescent Health Professionals (Family Physicians, Pediatricians, Nurses, Nurse educators, Public Health leaders, Behavioral physicians, etc) who would be present in each state of the country, and coordinate focal officers in each primary health center. This would enhance the training of the professionals who would utilize their knowledge and skills in the subspecialty/discipline, and apply their expertise towards the target populations from the grassroots up in a pyramidal format. Studies on the common issues confronting young people in each locality is to be conducted over time, in order to have a good grasp of the problems that need to be addressed in each locality.

Societal organizations focusing on adolescent health are to be partnered in the pathway to attaining positive adolescent health programs. Social institutions like schools, religious organizations, social development organizations, Ministries of Youth and development across all states, State Ministries of Educations, State Ministries of Health need to be contacted with collaborations sought for a long-term adolescent health program for our teeming adolescent population. Monitoring of activities in each state is being planned utilizing standard indicators of adolescent health and wellbeing as they are being conducted. An annual evaluation of the programs, advocacies, studies, etc conducted in each state would be carried at the end of each year.

## 11. Recommendations

1) Family physicians in Nigeria should apply their holistic

approach to health care in helping to solve adolescent health problems in the country.

- 2) A continuous knowledge and skills upgrading and updating is required by Family physicians to be able to lead the discourse and course of Adolescent Health care.
- 3) A collaborative effort should be promoted by Family physicians with organizations working in the Adolescent Health space.
- 4) Expertise in Adolescent Health needs to be demonstrated to the non-Family physician health professionals by primary health care physicians who are trained as multi-purpose doctors to serve in any health terrain.
- 5) The ongoing network of Family physicians In Nigeria should be consolidated by seeking government support for a national acceptance into the present heterogeneous Adolescent Health conglomerate in the country for a unified framework with Family doctors in the lead.

## 12. Conclusion

To sum up, the Adolescent health space in Nigeria is currently heterogeneous with various groups carrying out programs of interest to them to meet their own goals, which may not reflect the needs of the adolescent populations in specific settings. Global and local initiatives and programs by organizations have been examined and appear not to meet the expectations of adolescents, especially with the *Clinician approach* mostly excluded from the programs being carried out by the organizations. Therefore, it is imperative that Family physicians take up the leadership role in strengthening, coordinating and sustaining the Adolescent Health discipline in Nigeria, and beyond for them to serve as the holistic care doctors which they have trained to be.

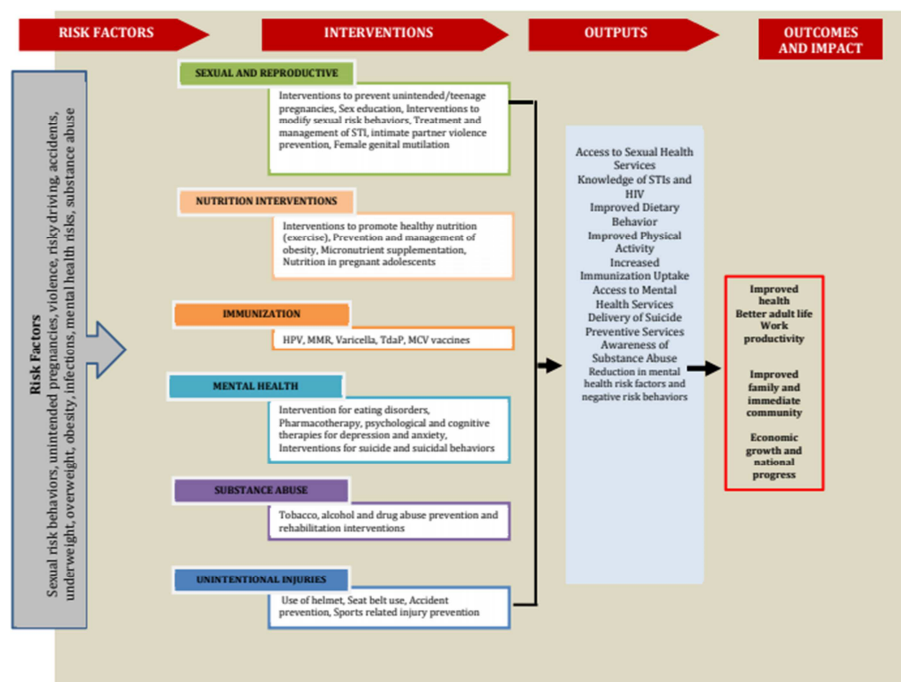


Figure 1. A Conceptual Framework of Interventions for Adolescent health program [30].



## Conflicts of Interest

The authors declare no conflicts of interest.

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