

THE ROLE OF PUBLIC HEALTH NURSES IN IMPROVING ADOLESCENT HEALTH

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ABSTRACT: Adolescent Health (AH) is an integral part of public health with the goal of improving healthy development, safety and well-being of adolescents because the behavioural patterns established during this period influence the health status of the adolescents and the risk of developing chronic diseases during adulthood. Adolescence being a time of great physical and psychological change, many social and physical conditions as well as behavioral pattern can impact adolescent health and heighten the risk of illness and diseases. This makes adolescents to be susceptible to various health issues by nature because of their stages of development, which affects their ability to make safe decisions, and the need to rely on significant others for support. Several other factors such as desire for greater autonomy, pressure to conform to peers, exploration of sexual identity, and increased access to and use of technology, violence and sexual abuse, social and cultural norms, family circumstances, emotional and physical environment of the adolescents contribute significantly to health issues being faced by the adolescents. Therefore, nurses have significant roles to play to ensure optimal growth and development of the adolescents and to prevent and reduce the impact of changes associated with adolescence on the health and well being of the adolescents. This paper presents the concept of adolescence; components of adolescent health; health-related challenges associated with adolescence and role of public health nurses.

KEY WORDS: Adolescence; Public Health; Nurses; Emerging

1 Introduction

Adolescent Health (AH) is an integral part of public health with the goal of improving healthy development, safety and well-being of adolescents because the behavioural patterns established during these period determine the health status of the adolescents and the risk of developing chronic health conditions during adulthood^[1]. Adolescence is a critical transitional phase of growth and development between childhood and adulthood usually between the age of 10 and 24 years and characterized by physical and psychological development from puberty to legal adulthood^[1-3]. This stage is a unique stage of human development and an important time for laying the foundation of good

health^[3]. During this phase, adolescents establish patterns of behaviour related to diet, physical activity, substance use, and sexual activity that can affect their health and the health of others around them and subsequently put their health at risk now and in the future^[4-5]. However, despite being thought of as a healthy stage of life, there is significant illness, injury and death in the adolescent years that are preventable and treatable^[6].

In addition, this stage is characterized by generally healthy times of life, some important health and social problems either start or peak during these years including mental disorders, substance abuse, smoking, nutrition and weight conditions, sexually transmitted infection including human im-

munodeficiency virus (HIV) teen and unintended pregnancy, homelessness, academic problems and dropping out of school, homicide, suicide^[8-10]. Although, there are many effective policies and programs that address Adolescent health related issues such as access to health care, school-based health care services, prevention of substance use, violence and delinquencies, mental health and substance use intervention as well as HIV prevention yet, many adolescents are not aware of the programme and were not fully involved in adolescent health-related program that can improve their health outcome^[11-12].

These suggest that the leading causes of illness and death among adolescents are largely preventable or treatable. Nevertheless, to ensure adequate growth and development of adolescents in good health there is need for information including age appropriate comprehensive health and sexuality education, opportunities to develop life skills; health services that are acceptable, equitable, appropriate and effective; and safe and supportive environments^[12]. They also need opportunities to meaningfully participate in the design and delivery of interventions to improve and maintain their health. Expanding such opportunities is key to responding to adolescents' specific needs and rights^[13].

Furthermore, there are certain issues that put adolescent health on the priority list of public health which can influence how the health of the adolescents will be approached in the coming decades^[14]. It is however important that the public healthcare providers especially, public health nurses have the understanding that the population of the adolescents is becoming more ethnically diverse and the growing ethnic diversity will require cultural responsiveness to health care needs as well as sharpened the attention to desperate health, academic and economic outcomes^[15]. Therefore, this review aims at exploring the vulnerability of adolescents to health-related challenges, determinants of health related issues among adolescents and role of nurses in ensuring effective adolescents health care services.

1 Vulnerability of Adolescents to health-related challenges

Adolescents are vulnerable population and are susceptible to various health issues by nature because of their stages of development, which affects their ability to make safe decisions, and the need to rely on significant others for support^[16-18]. Adolescence being a time of great physical and psychologicals change, many social and physical conditions as well as behavioral pattern can impact adolescent health and heighten the risk of illness and diseases^[19-20]. Also, adolescents can be particularly vulnerable due to risk factors that contribute to stress during adolescence, such as a desire for greater autonomy, pressure to conform to peers, exploration of sexual identity, and increased access to and use of technology, violence and sexual abuse^[21]. This suggests that the higher the numbers of risk factors adolescents are exposed to, the greater the potential for health conditions and challenges^[21].

In view of adolescents vulnerability to health-related conditions, all nurses should have the knowledge to assess and intervene, even if they are not trained adolescents' healthcare professionals. Nurses are perfectly positioned to get to know the adolescents and their families, learn their history and family dynamics, and provide education and resources that will enhance the healthy development of the adolescents^[22]. More so, health care providers especially nurses and midwives as well as public health nurses have a crucial role in assessing vulnerable adolescents in all healthcare settings^[16-17]. Engaging in formal and informal assessments that can identify adolescents at risk for adverse health conditions saves lives. However, to improve the health of the adolescents, nurses must first understand the complexity of the many risk factors contributing to adolescent health, the impact of early recognition of adolescent health condition, and the use of valid assessment and screening tools to identify adolescent vulnerability to diseases and illnesses and implementation of interventions to prevent complications^[17].

2 Components of Adolescent Health

Adolescence is a significant period for health promotion and diseases prevention among adolescents but it is often overlooked. According to Sheehan et al.^[23], in both low/middle and high countries, about 42 million adolescents, who are between the ages of 10 and 19, are generally healthy. In the recent years, there has seen a reduction in sexual risk behaviors, teenage pregnancy and births, smoking, and use of some substances, as well as higher academic achievement for younger adolescents^[14]. However, all adolescents can still benefit from guidance on how to improve their health and development during these critical years^[24].

Adolescents' health focuses on the health care needs of the adolescents, health conditions and injury^[12]. This makes the health care providers in this field to be accustomed with the assessment of developmental complications associated with specific health problem and assist the adolescents and their families to come up with strategies to deal with chronic health issues both now and in future. Having understood that during adolescence, young people are usually strengthening by the abstract reasoning and executive functional skills that help them to set long-term goals and make rational decisions, in the same vein their heightened neurobiological flexibility and resilience make them vulnerable to harmful or unhealthy influences that can set them on less positive paths^[25]. Additionally, according to United Nations International Children's Emergency Fund (UNICEF)^[26], adolescent health includes changing transitions within multiple domains such as physical, social, emotional, cognitive, and intellectual. The fast-paced development of these different domains can lead to phenomenal growth occurring at different rates, which can put adolescents at a higher risk for risk-taking behaviors and emerging mental health issues^[27]. Therefore, it is important to understand adolescent development, environmental influences, the risk and protective factors that can affect adolescent health

so that government agencies, organizations and individuals who work with youth can support the health and healthy development of all adolescents^[10].

3 Determinants of Adolescents' Health

Adolescence is considered a critical period of human development with associated rapid physical, psychosocial, emotional and cognitive development, as well as sexual and reproductive maturation. Though, biology growth impacts adolescent health and development, however, social contexts including families, media, schools, and neighborhoods where adolescents live, learn, and grow also have a great influence on their health and well-being^{[12][9][14]}.

Social and cultural norms: Social and cultural norms, particularly regarding gender, as well as ethnicity, sexual orientation, or disability, significantly determine social patterns of behaviour and can influence everyday choices, needs and expectations of the adolescents^{[28][8-10]}. For instance, girls are more likely to be married as children, drop out of school, experience sexual violence and have restricted opportunities due to early pregnancies^[29]. Also, attitudes associated with masculinities contribute to boys engaging in more risky behaviours like harmful substances use, with greater exposure to interpersonal violence and higher rates of injuries^[30].

Adolescent independence and autonomy: During adolescence, there is a significant increase in independence and autonomy from family and peer relations become more significant^{[9][14]}. In the same vein, family and parents or caregivers have a great influence on adolescent health. Nevertheless, family connectedness protects the adolescents from multiple health risks^[31-33].

Impact of family circumstances: Family situations can also impact the health of adolescents, through violence and abuse, impairment of identity development such as attitudes towards gender and sexual identity, harmful practices like child marriage, female genital mutilation/cutting, or paren-

tal absence and migration^[34]. Families can also serve as a strong influence for accessing education, health services, and other health resources.

Social, emotional and physical environment of adolescents: The social, emotional and physical environments in which adolescents live and learn have significant influence on their health. More significantly is transition from climate change to armed conflict, migration and economic downturns. Also, adolescents are sometimes distinctively affected by the risks and opportunities emerging from urbanization and globalization^[28].

Technological advancement: New technology and increase access to social media provide opportunities for information and services, but can also reinforce vulnerabilities, including exposing adolescents to bullying, sexual abuse, depression or mental health conditions.

Habit formation: Adolescents are also vulnerable to the commercial environment, especially as it relates to food, tobacco and alcohol advertisement and sales^[26]. More so, factors related to physical environment, such as road and playground safety, access to footpaths and parks, water and sanitation and pollutants also influence adolescents health and wellbeing^[14].

4 Adolescents' Health Issues

Long-term or chronic health problems during adolescence period often make physical and emotional development more complicated. Illnesses, injury, medical treatment, hospitalization and surgeries associated with chronic illnesses can cause anxiety and emotional trauma to the adolescents. According to World Health Organization (WHO)^[12], diseases and injury experienced by adolescents have been found to be mostly avoidable yet neglected. In 2015, adolescents globally contribute about 60% of the 135.6 million years lived with disability and about half of global adolescent mortality (45%) occurred in Africa^[35]. Evidence suggested high prevalence of mental health issues among in-school adolescents while 16.3% was reported among rural in-school adolescents, 23.8%

mild to moderate depression and 5.7% definite depression among urban dwelling adolescent students with higher incidence of depression been reported in females and older adolescents^[36-37]. Adolescent mental health issue was suggested to be associated with low socioeconomic class, parental separation, being from a single parent or polygamous home, previous experience of violence, low physical activity/sedentary lifestyles, overweight/obesity and previous history of sexual abuse^[36-37].

Patton et al.^[14] stated that around the world, health services and policies have largely ignored adolescence. Estimates of 1.2 million adolescents die each year, largely from preventable causes^[12]. This age group has failed to experience the improvements other segments of the population have seen. For instance, while under five deaths halved during the Millennium Development Goals period, progress in adolescent mortality stalled^[32-33]. UNICEF^[26] also reported that since 2010, AIDS-related deaths among children have halved, yet have decreased by only five percent among adolescents. Young women, especially vulnerable to complications of unsafe abortion and pregnancy, are less well covered by services than older women^[38-39]. Mortality and disability-adjusted life years (DALYs) lost due to road injuries which is the leading cause of deaths in adolescence are not declining, particularly among adolescents in Low/Middle Income Countries as they become more mobile^[28]. The followings are the common health issues associated with adolescence.

Adolescent Stress

Most often, adolescent period can seem like a whirlwind of rapidly changing emotions. In fact, some earlier theories about adolescent development proposed that "storm and stress" was to be expected, and suggested adolescents characteristically tended to over-react to everyday situations^[40]. More so according to Shaikh^[40] and Deka^[42], it was stated that what may appear as "storm and stress" is actually the natural outcome of youth learning to cope with a much larger array of new and unfamiliar situations. However, the ability to

adaptively cope with stress is influenced by many factors. Certain genetic factors, such as temperament, make some people more sensitive to stress. On the other hand, certain environmental factors such as family and community can help to mitigate the effect of stress by enabling youth to become more resilient in the face of stress^[43].

However, certain protective factors can reduce the effect of stress and increase adolescents' resilient during the stressful situation because resilient adolescents will experience fewer negative reactions, negative behaviour in response to stress and fewer adverse consequences of stress^[44–45]. More so, social support provided by family, peers, teachers, adolescent health care providers will assist the adolescents in handling stressful and challenging circumstances^[46]. This in turn will give the adolescents sense of safety and security in coping with stress couple with favourable cultural practices and environmental factors^[45–50].

Behavioural health issues

Adolescent sometimes exhibit some behavioural and mental disorders such as suicide, depression, anxiety, substance use disorders and eating disorders. Evidence suggests that suicide is the leading cause of death among people aged 10–34 years and suicide ideation intensifies between the ages of 12 and 17 years with almost two-thirds of adolescents moving from ideation to planning and more than three-fourths from ideation to attempt during the first year of onset of ideation^[51]. The risk of suicidal behaviour can be attributed to neurobiological mechanisms, however, suicidal behaviour can also be genetically inherited^[52]. Environment and context factors also play a significant role in suicidal risk, especially the quality of familiar relationship and experience of the adolescents from the family members^[53].

Depression is also a serious behavioural health issue among adolescents and this is sometimes associated with early life adversity. Early-life adversities contribute disproportionately to many health problems, both physical and mental, and increase both metabolic dysregulation and treatment-resis-

tance depression among adolescents^[54]. Depression in adolescents is usually triggered by more frequent exposure to social stressors, peer victimization and the fear of being negatively evaluated by peers and adults. This invariably contributes to a type of long-term neurological development that underlies emotion processing and regulation in social contexts. More so, alterations in the development of neurological function can lead to increased vulnerability to or worsening of depressive symptoms among adolescents^[55].

Additionally, anxiety is a significant behavioural problem among adolescents, and many adolescents and young people met the criteria for anxiety disorders. According to Beesdo et al^[56], the most frequent anxiety disorders among adolescents are separation anxiety disorder and specific and social phobias occurring more frequently in females than males. The heightened expectations on social acceptance in adolescents can trigger a corresponding fear of rejection that contributes to social anxiety and depression. Evidence suggest that for some adolescents, physical symptoms of anxiety such as stomach or headaches may go unrecognized, but with hormonal changes during this period symptoms may also manifest as behavioural defiance instead of the more typical cognitive symptom such as worrying^[57]. Therefore, understanding adolescents vulnerability to anxiety disorders is critical to better address the needs of adolescents already diagnosed and to reduce future prevalence of the condition.

Furthermore, substance use and addiction pose a significant threat to adolescent health. This behavioural problem is characterized as a problematic pattern in the use of an intoxicating substance that results in significant impairment and distress^[58–59]. An important aspect of substance abuse in adolescence is comorbidity with other mental health conditions such as anxiety and depression^[60]. This is directly associated with neighborhood social disorganization such as level of crime, disinvestment and population turnover and social capital like the degree to which the member of the

community are engaged in communal life are significantly related to opioid misuse in the adolescents^[61]. However, Wilson et al.^[62] stated that to help adolescents overcome substance use addiction and disorders, the health care providers must create cordial relationship in a friendly health system. This is very crucial to ensure confidentiality which is found to be central to facilitating honest disclosure from adolescents about all sensitive matters including substance use and need for treatment^[62].

Lastly, adolescence is a period of greater sensitivity to peer influence, social acceptance and rejection and social stimuli^[63]. Eating disorders and associated body dissatisfaction are critical behavioural health issues among adolescents because during adolescence, body image is related to identity development and mental health as well as family peer and romantic relationships, when adolescents are dissatisfied with their physical appearance, it can hamper their ability to complete the physical and socio-emotional tasks of development as well as damage their physical and mental health. Body dissatisfaction in some adolescents is associated with changes and alteration in body image coupled with a greater tendency towards social comparison and stronger pressure to conform to gender roles^[63]. More so, obese and overweight adolescents are vulnerable to body dissatisfaction due to weight stigma, weight-based harassment and teasing, bullying and victimization especially for girls^[64]. This is also applicable to underweight boys, therefore, weight-based victimization experience among peers increase adolescents' risk of low self-esteem and poor body image; bully and teasing associated with weight gain also increase adolescent risk of mental and physical health outcomes such as depression, anxiety, suicidality, self-harm behaviours, substance abuse and disordered eating behaviours^[64]. Eating disorders such as anorexia nervosa, bulimia nervosa, sub-threshold anorexia nervosa, and sub-threshold bulimia nervosa and sub binge eating disorders often associated with body dissatisfaction and affect all genders, races, ages and weight statuses

5 Nurses Role

Nurses are part of healthcare work force that ensure effective delivery of health care services and interact directly with adolescents within the health care system. Nurses being at the centre of health care system and services play a significant role in providing effective care to the adolescents, most especially in regard to the unique healthcare need of the adolescents. Therefore to ensure optimal growth and development of adolescent, nurses are expected to identify the these unique needs of the adolescents and ensure timely intervention.

Nurses serve as adolescents' educators, advocates, counselors, confidants and in matters related to their health. It is also the responsibility of nurses to guide adolescents' parents to appreciate that every child is unique and should prevent unhealthy comparison that can lead to adolescent stress and subsequent behavioural problems. Nurses also provide adequate information to the adolescents on what is required to live a healthy lifestyle including behavioural, sexual and reproductive information. More so, it is the responsibility of nurses to reach out to adolescents in the community, at home, school and religion gathering to provide intensive education on developmental processes of adolescents, sexual and reproductive health as well as societal expectation during this period. In view of this, nurses must ensure that adequate information is given to the adolescents on personal hygiene including menstrual hygiene, adequate nutrition, and ill effect of illicit use of drugs.

Moreover, nurses are in the best position to identify and manage adolescent health issues and should be able to liaise between parents and their adolescents because sometimes adolescent parents are insensitive to the health care needs of their wards and most often they hoard information from the adolescents especially in matter related to puberty and sexuality. Therefore, nurses can guide the parent to identify problems being faced by the adolescents and they should be guided to be close friends with them and facilitate good communication.

tion. Lastly, nurses can as well liaise with the schools to provide a safe, and conducive physical, emotional, and social environment for the adolescents thus reducing stress associated with adolescence.

6 Conclusion

Adolescence is a crucial stage that determines the health status of this age group as the changes during this period contribute significantly to health issues being faced by the adolescents. Nurses are in the unique position to contribute to the health of the adolescents by identifying adolescents' health challenges and provide essential care needed to ensure optimum growth and well-being of the adolescents. Based on the adolescents' vulnerability to certain health issues as discussed in this review, it is therefore recommended that social, emotional and psychological support should be provided for adolescents during this period to help them gather experience that will give them confidence managing stressful situation. Nurses should utilize holistic approach in assessing and identifying health care problem of the adolescents and institute appropriate and timely intervention.

7. References

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