

What are the social, psychological and physical health challenges facing adolescents in the UK?

Abstract

To say that adolescence is an important time of life is a colossal understatement. The ages of ten to nineteen are monopolised by biological, psychological and sociocultural changes, all of which impact health in the present and future. Adolescents have specific health needs that differ from children and adults¹. Adolescence is a time to develop a self-identity, acquire skills and knowledge and begin to assume adult roles in society⁸. Behaviours and habits acquired during adolescence can have long-term impacts⁹. This essay will outline some key challenges facing adolescents in the United Kingdom (UK) today. The current generation of adolescents are uniquely affected by contemporary factors such as social media and air pollution, the impacts of which have yet to be fully unravelled. As a result, interventions aimed at improving adolescent health will need to evolve to remain relevant.

Keywords

Adolescence, sociocultural change

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Introduction

To say that adolescence is an important time of life is a colossal understatement. The ages of ten to nineteen are characterised by biological, psychological and sociocultural changes, all of which impact health in the present and future. Adolescents have specific health needs that differ from children and adults¹. The notion that adolescence is a unique part of life is not limited to humans. In fact, many of the behaviours stereotypically associated with adolescence (for example, increased risk taking) are seen in other species too².

Physically, adolescents go through several changes, such as the development of secondary sexual characteristics and growth to their adult height³. These changes do not occur uniformly amongst all adolescents; they depend on factors such as ethnicity, gender and body mass index, as well as external factors such as nutrition and the social environment⁴⁻⁶. Brain maturation is not complete until around twenty-five, which suggests that experiences which occur during adolescence can significantly impact neural development⁷. There are many sociocultural changes that occur also. Adolescence is a time to develop a self-identity, acquire skills and knowledge and begin to prepare to assume adult roles in society⁸.

Behaviours and habits acquired during adolescence can have long-term impacts⁹. Smoking, alcohol use, obesity and physical inactivity are all examples of health-related behaviours that usually start in adolescence and contribute to the global epidemic of non-communicable diseases in adults^{10,11}. These behaviours are influenced by socioeconomic and cultural factors and are major determinants of future health inequalities¹². This essay will outline some key challenges facing adolescents in the United Kingdom (UK) today.

Mental Health

Mental health disorders are one of the largest contributors to the burden of disease in adolescence globally¹³. The World Health Organisation (WHO) estimate that 10-20% of all children and adolescents experience mental health problems¹⁴. It is estimated that half of all mental health disorders are established by fourteen years^{15,16}. Furthermore, the prevalence of depression and anxiety in adolescence has increased significantly in the past twenty-five years,

and in the UK, the rate of self-harm in girls aged 13-16 has risen by 68% in the past decade^{17,18}. The reasons for these increases are not fully known. However, depression and anxiety have several adverse consequences on development, such as lower academic performance, impaired social relationships, increased risk of substance abuse and suicide¹⁸. Therefore, understanding the impact of mental health disorders on adolescent health is a priority.

Social Determinants

The WHO defines the social determinants of health as "the conditions in which people are born, grow, live, work and age"⁵. Education is one of the strongest social determinants of health¹⁹, and completing secondary school is associated with improved health outcomes⁹. This is particularly relevant in England, since changes in the education system have led to the extension of the age for compulsory participation in education or training to eighteen, making this a positive initiative for health reasons also²⁰.

The impact of education is vast and exceeds beyond gaining qualifications. School is an important social environment which can influence peer connections, emotional wellbeing and health. A stronger engagement of adolescents and their families with school positively effects health outcomes directly^{9,21}. In the UK, poor academic performance is a risk factor for adolescent smoking. Furthermore, adolescents tend to have friendship ties with people of the same smoking status and level of academic performance²². Therefore, anti-smoking interventions that target poor academic performance specifically may be beneficial to decrease smoking related health inequalities in the long-term.

Socioeconomic Status

Living arrangements and employment status are important determinants of health. Whilst youth homelessness in the UK is difficult to quantify, several reports indicate a recent increase²³. Homelessness during adolescence has several detrimental effects, such as an increased risk of infectious diseases, alcohol use and mental health disorders²⁰, and being at risk of child sexual exploitation and abuse. Furthermore, many homeless adolescents may go undetected by official counts²⁰. Adolescents who report sleeping on sofas of friends or on public transport are termed "hidden

homeless"²⁰. This is a serious issue, as they may not receive the support they require.

Overall, those who are long-term unemployed have a lower life expectancy and worse health²⁴. However, there is limited research into the impact of unemployment on adolescents specifically²⁰. The recent shift in working patterns in the UK has seen more businesses using zero-hour contracts²⁰. This may be particularly relevant to adolescent health, as adolescents on zero-hour contracts are more at risk of health problems compared to their peers²⁵.

Relationships

Relationships with family, teachers and peers can affect adolescents mentally and physically. It is of no surprise that family structure plays an important role in human development, and can impact health in the long-term²⁰. An observational study conducted in the United States of America showed that adolescents from two-parent households have higher self-rated health scores at age thirteen and in adulthood²⁶. Parental behaviours also impact health. Adolescents whose parents smoke, drink or engage in violence are more likely to engage in these behaviours themselves⁹. This suggests that public health interventions that target both parents and adolescents may be useful in reducing these behaviours.

The formation of peer relationships is one of the key developmental changes of adolescence. This is important, since peers can have both positive and negative influences on health⁹. Peer relationships allow adolescents to buffer the effects of life stressors, however, peer rejection can cause considerable distress^{9,27}. There is also significant evidence showing the role of peer influence in the development of antisocial behaviour, substance misuse and participating in criminal activity^{9,20}.

One challenge facing adolescents regarding peer dynamics is bullying. In the UK, victims of bullying are more likely to be absent from school, have lower educational qualifications and increased mental health problems²⁸. Although the UK government requires state-funded schools to include anti-bullying measures in their policies²⁹, the rapid development of technology means that cyberbullying is a rising concern; the impacts of which are less documented.

Technology

What it means to be an adolescent today is vastly different compared to even the previous generation. This is partially due to technological innovations which have allowed for increased global connectivity, internet access and social media use⁷. Social media gives adolescents a platform with which to actively engage with world affairs and each other. However, its use can also negatively influence health. For example, several studies show a significant link between adolescent social media use and depression¹⁸. The reasons for this have not been completely elucidated, but the impact is likely multifactorial, involving factors such as impaired sleep, sedentary habits and addictive behaviour¹⁸.

Nevertheless, social media is an intensely powerful platform that can be used to promote the health of adolescents³⁰. For example, South African multimedia "edutainment" programme *Soul City* helped to change stereotypes about Acquired Immunodeficiency Syndrome and domestic violence, and has contributed to the empowerment of local communities³¹. Adolescents should be included in the development of future interventions using social media so as to accurately reflect their needs.

Internet addiction is an increasingly prevalent concern. Problematic internet use (PIU), defined as a psychological dependence and lack of control over the time spent online, is an important area of research, as it can impact emotional well-being, relationships and everyday functioning of adolescents³². The symptoms of PIU are similar to those of substance-related addictions, including unpredictable behaviour and mood. Addictive behaviours that are developed in adolescence are likely to continue into adulthood, making this a particularly important issue³³.

Excessive use of technology can also impact physical health via sleep disturbance. Sleep disturbance is associated with poor academic performance, increased risk of mood disorders and obesity³⁴. As a result, the American Academy of Paediatrics recommend that young people should limit their screen time to avoid sleep disruption³⁵. Furthermore, the use of behavioural modification strategies to improve sleep may have several benefits for adolescents.

Environmental Factors

Air pollution is a worldwide environmental health issue, with particular concerns in large cities, where the air quality is relatively worse³⁶. It is well known that air pollution is a strong risk factor for poor cardiovascular and respiratory health³⁷. However, there is increasing evidence to suggest that air pollution is associated with mental health problems in adolescents as well³⁸. The pathophysiology may involve the effect of inflammatory stimuli such as inhaled pollutants on the brain³⁹.

Roberts et al³⁸ investigated the associations between air pollution exposure during childhood with concurrent and later mental health problems in a cohort from London. They found that pollution concentration levels at age twelve were associated with an increased risk of depression at eighteen. Although further investigation is required to understand the mechanism of this association, this finding adds to the growing list of reasons why tackling pollution should be a top priority for the UK government.

Conclusion

The range of factors that affect adolescent health are vast. How adolescents develop is rapidly changing, and the link between health outcomes and social determinants is increasingly complex. The current generation of adolescents are uniquely affected by contemporary factors such as social media and air pollution, the impacts of which have yet to be fully unravelled. As a result, interventions aimed at improving adolescent health will need to evolve to remain relevant.

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