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Addressing the health needs of adolescents in Europe

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1. Introduction

The World Health Organization (WHO) defines adolescence as ages 10 to 19 years old, overlapping with the concept of young people (ages 10 to 24). At present, it is estimated that approximately a quarter of the world's population, that is 1.8 billion human beings, make up this group. For countries in Europe, according to the United Nations *World Population Prospects: The 2015 Revision*, the proportion of the population that comprises adolescents aged 10 to 19 are up to 14%. A Eurostat report for the EU-28 in 2017 reported that approximately 8.25% of the population accounted for males aged 10 to 24 years old and 7.9% for females ages 10 to 24 years old. Yet, when it comes to research, policy, or efforts, focus tends to fall on younger children and adults, in effect ignoring the actual needs of adolescents.

While the health of adolescents has improved as a result of prevention and intervention efforts in childhood, it has done so far less than that of children under the age of 10. Furthermore, in efforts to address adolescent problems, it has been noted that the light falls on specific aspects, rather than the group as a whole. Thus, issues at hand (for example, mental health, sexual health, and obesity) tend to be identified as isolated events, rather than a developmental course of events that can be addressed via a life-course framework. The WHO (2014) report on adolescent health outlines that adolescence is a critical time for human development that ought to be given special attention. In line with this opinion, the World Federation for Mental Health has chosen the theme for 2018's World Mental Health Day campaign to be "Young People and Mental Health in a Changing World." The goal is to bring attention to the issues that young people face in the world today by beginning the conversation around their needs in order to "grow up healthy, happy and resilient." They further state that the world's future depends on taking a stand for this vulnerable population.

Research in the last decade has contributed to gaining a new understanding of adolescence as a critical time for human development. Whereas previously held belief had us think that adolescence is generally a healthy life period, research has found that the influence of brain development combined with social environment factors contribute greatly to adolescent health outcomes. Unarguably, the first decade of a human being's life are important, but so are second and third decades. At present, global trends such as unhealthy lifestyles, family instability, and armed conflict, present as major threats to adolescent wellbeing. And while global and national strategies may exist, limited resources and technical capacity pose challenges in effectively responding to adolescents' needs for a healthy future. This is affected by the differing national profiles and needs which, in turn, affect the implementation of global strategies put in place to address the issues at hand.

Bundy, de Silva, Horton, Patton, Schultz, and Jamison (2018) in a World Bank publication on *Child and Adolescent Health and Development* state that "Ensuring that life's journey begins right is essential, but it is now clear that we also need support to guide our development up to our 21st birthday if everyone is to have the opportunity to realize their potential" (pg. 1).

The authors also point out that there is an evident bias not only in investment, but also in research when it comes to comparing childhood versus adolescent needs. Specifically, they report staggering numbers (over 90%) of publications available favouring research for children under the age of 5, instead of paying attention to adolescence, thus contributing to the lack of data. This clearly reflects the need to readdress how research funding, policy and action are currently narrowly focused on the early years when it comes to prevention and intervention. Even though this focus has helped with achieving the United Nations Millennium Development Goals (MDG), they have encouraged us "turn a blind eye" to the fact that the growth and development occurring before one reaches adulthood is equally important due to its complex nature and amenability to intervention.

The present report aims to highlight the uniqueness that is adolescence and the need to turn the spotlight on addressing adolescent health by presenting a rationale for this shift. The report addresses individual and contextual factors impacting on adolescent health, and the challenges they present. It will highlight methods and best practices already in place, as well as presenting recommendations. The case is made for giving a voice to young people and involving them in decision-making processes, in moving away from traditional methods that may not correspond to this day and age's digital and fast-paced world, as well as developing and implementing programmes which will be holistic and developmentally appropriate for the context and purpose they are intended.

2. The need to focus on adolescence

The number of adolescents has grown as a result of the success of prevention and intervention efforts targeting health issues in childhood, such as malnutrition, infant mortality, and reduction in infectious diseases. At the same time, there has been a shift in efforts to address sexual health, substance problems, mental health, risk-taking behaviours, and physical health issues that become more prominent in adolescence. Despite these successes and developments, the uniqueness of adolescence is not truly addressed in that this life period presents social experiences and social-role changes, risk and protective factors, and specific biological factors that vary from person to person. Bundy and Horton (2017) report that two of the three critically important phases of development in the first two decades of one's life are the "early adolescent growth spurt (ages 10 to 14 years)" and the "later adolescent phase of growth and consolidation (ages 15 to 19 years)", with a third one of middle childhood (ages 5 to 9 years). What sets the two phases apart is the need to design and implement age-specific interventions to address age-specific problems.

Traditionally, adolescence has been viewed as socially important due to its transitive, formative nature for upcoming adulthood. Gates (2016) indicated that it is a "dynamic period of cognitive and physical development" that can greatly contribute in a positive way in the format of opportunity, contribution, and achievement; but it can also be ridden with experiences laden with trouble for the present and future of the person. For instance, it is the age where most commonly mental disorders emerge, where substance abuse typically starts, and other troubling behaviours emerge (e.g., suicide, self-harm, inter-personal violence, risk-taking behaviours).

Moreover, it is a time when adolescents form their identity, find their voice. Bundy and colleagues (2018) identify the increasing importance of self-agency during these years. In this realm, the concept of adolescent-friendly health services has been adopted (in addition to child-friendly services), yet the authors note that the ability or opportunity for adolescents to make their own decisions about their health and the correspondence of the services available to the need are limited.

Resnick, Catalano, Sawyer, Viner, and Patton (2012) suggested that "investment in adolescent health is essential" (pg. 1565). UNICEF, in its 2011 assessment, promoted the need to invest in adolescence, not only because it is "right in principle," but also because it safeguards the initial investment in childhood health; it provides an early start for societal goals such as alleviating poverty, achieving equity, and eliminating sex discrimination; and it also helps equip adolescents with the necessary tools and coping skills for present and future challenges (Resnick and colleagues, 2012).

3. The rationale for the shift

3.1. Socio-cultural determinants of adolescent health – family, neighbourhood, community, media, school, society

The WHO Commission on the Social Determinants of Health defined contextual factors impacting on health and development as "the conditions in which people are born, grow, live, work, and age" (Viner, Ozer, Denny, Marmot, Resnick, Fatusi, and Currie, 2012). The European Commission (2000) in a report on young people's health in the European Union states that "poverty, family breakdown, lack of social support and of educational or professional challenges, or ... low quality of food ... impede healthy growth and development" (pg. 7) for a considerable number of young people in Europe.

These marked differences in social and cultural determinants of health are expected to lead to increasing inequalities in young people's health. There is a bi-directional relationship between individual and societal problems faced by adolescents, which are shaped by the context within which adolescents live and grow up. Adopting an ecological framework provides a clearer basis of understanding how the relationships work due to placing an emphasis on a holistic point of view of the problems that arise, rather than examining them in isolation (Blum, Bastos, Kabiru, and Le, 2012).

As noted above, adolescence is such a fundamental and complex time affected by many factors. For example, one could assert that access to and successful completion of education has a domino effect not only on adolescent health, but also on societal health due to its economic and political benefits (Viner and colleagues, 2012). What we also know is that the changes we see during this time are dependent on societal norms, which change from one generation to the next. At the same time, adolescence tends to be perceived as a healthy phase of life, whose consequences can only be seen, evaluated, or even addressed, later on once they manifest themselves (Resnick and colleagues, 2012). As a result, it is easy to lose sight of the issues at hand, or to be short-sighted when it comes to proposing solutions. Some of these consequences will remain largely unknown due to the fact that these challenges are new to the present generation of adults.

One such case of “new generation challenge” is the use of media and technology. Prominent examples of adolescent health affected by media and technology use are present in the extent of cyberbullying in recent years and the “blue whale challenge.”

These examples further support the notion that adolescents can be active agents of change within their communities. They also support the notion that adolescence is prime time for targeted behavioural intervention efforts that can be “both highly effective and highly cost-effective” (Sawyer and colleagues, 2012).

3.2. Health issues in adolescence – physical health, mental health, sexual health

Despite the fragmented body of research on adolescent health compared to child and adult health, the data that does exist paints a clear picture which points out that it is high time to turn our attention to this age group. From a biological standpoint, there are physical changes taking place such as the adolescent growth spurt between the ages of 10 and 14, and the adolescent growth and consolidation phase between the ages of 15 and early 20s. Here we see major changes in body mass, in puberty-related physiological and behavioural changes, as well as brain changes related to exploring and experimenting, all of which determine health behaviours later on in life (Bundy and colleagues, 2018). Brain changes alone during adolescence contribute to many of the distinct problems that appear in adolescence for the first time (Grigorenko, 2017). For example, while sensorimotor and language skills develop earlier on, executive control and other higher functioning actions develop later on in adolescence. These changes need to be taken into consideration when addressing adolescent health needs.

We know that there are factors that affect adolescent health that are viewed as “normal” for adolescent development, like risky behaviour. However, the negative effects are almost immediate in these cases and can frequently be prevented. Sawyer and colleagues (2012) point out that the leading risk factors for disability-adjusted life years (DALYs) are alcohol (7%), unsafe sex (4%), iron deficiency (3%), lack of contraception (2%), and illicit drug use (2%). All in all, at least 15% of worldwide disease burden can be accounted for in 10-24 year olds. In addition, the authors cite findings from various research that are worrisome and strongly support why we should focus on adolescents. Specifically, and among other findings, research has indicated that 75% of mental disorders present before the age of 24, 50% before the age of 14 (Kessler, Bergland, Demler, Jin, & Walters, 2005), and neuropsychiatric disorders (for example, cognitive disorders, substance-induced disorders, attentional and sleep disorders) are the leading cause of disability in 10 to 24 year olds (Gore, Bloem, Patton, Ferguson, Joseph, Coffey, Sawyer, & Mathers, 2011).

Research evidence cited by Sawyer and colleagues (2012) found that the median onset of substance-misuse disorders is 19 to 21 years, while 17% of 13 to 15 year olds smoke; self-harm is a leading cause of death, second only to road traffic accidents; and 70% of overweight adolescents have one or more risk factors for cardiovascular disease. While some child-focused prevention efforts partially address these issues, the numbers present clearly that these efforts are not enough in adequately addressing the health issues arising during adolescence.

The European Commission’s report (2000) noted the following main findings for EU member states:

- Approx. over 30 000 lives are lost between the ages of 15 and 24, where traffic accidents are the biggest cause and suicides account for one in ten deaths.
- Approx. one in four young people report psychosomatic symptoms.
- One in ten report some form of disability.
- Approx. 10% of 15 to 24 year olds report diagnosable depression and, overall, there is an estimate of 15-20% suffering from some form of mental disorder. Mental health issues are particularly high in underprivileged groups.
- In terms of reproductive health, where data is available, there are the following findings:
 - Adolescent abortion rates range between 5 and 22 per 1000 females, 8 to 28 for 20-24 years old.
 - Chlamydia, the most common STD, is diagnosed in 5-7% of young people.
- 50-80% of adolescents aged 15 have tried smoking, where 1/5 of all 15-year-olds smokes daily and most young people continue on to be regular smokers into adulthood.
- Alcohol consumption begins at a younger age than it used to and it is more common in boys.
- Experimenting with substances is common in adolescence. Misuse and dependence in 15 to 24 year olds is often connected to some form of mental health issue (e.g., depression).
 - Experimenting with cannabis in 15 to 16 year olds ranges between 4 and 41% across EU member states.
 - Experimenting with amphetamines 1 to 13%
 - Cocaine up to 4%
 - Heroin up to 2%
 - Ecstasy up to 9%

- Solvents up to 20%
- Physical activity levels are insufficient to attain health benefits and the raising rates of obesity are particularly alarming.

These numbers appear to be similar in European countries that are none EU member states and have been consistent despite the two decade gap with the present report.

Major health risk factors in adolescence are a) tobacco use, which has an overwhelming onset during this time; b) alcohol and binge drinking, which persist despite various efforts having been developed and implemented; c) overweight and obesity that have notably increased in the last two decades; and d) sexual activity in terms of earlier first experiences, with limited access to contraception and risk for unwanted pregnancy. These are noted based on global data and surveys and primarily reflect research conducted in the USA and sub-Saharan Africa, less so in Asia, South America, Oceania, and even less so from Europe. The “uniqueness” of the European data can be attributed to two areas: 1) a failure to collect and to understand risk factors and their impact on later life due to the fragmentation of health in Europe, and 2) the fragmented or single focus research where the interests of researchers are prominent and not necessarily where the burden of disease occurs, that is not necessarily exclusive to European data though.

3.3. Adopting a life-course approach to health

We know that prevention and early intervention are important in promotion of healthy adolescent development and an even healthier adulthood through efforts in prevention (Bundy and colleagues, 2018). That is addressing specific risk processes beginning in or before adolescence that affect adult life such as non-communicable diseases, mental disorders, and injuries (Sawyer and colleagues, 2012). As seen above and discussed further in the sections below, adolescence is a critical life period where behaviours appear, habits are formed, and many of them continue into adulthood having long-term health effects that impede on one’s quality of life and incur costs for both the individual and the state. Therefore, addressing the health needs of adolescents would require preferring a life-course approach to dealing with health issues over the current fragmented approach of addressing separate health issues as they appear.

4. The present: current practices

4.1. Best practices and evidence-based efforts

Around Europe and within member states of the Council of Europe one can find examples of best practices applied and evidence-based programmes implemented in areas pertaining to adolescent health. For example, in the area of mental health, a systematic review on interventions has found that these efforts whether school-based, community-based, online, or individual and family-based provide substantial support to adolescents where implemented, but with varied results in certain cases (Das, Salam, Lassi, Khan, Mahmood, Patel, & Bhutta, 2016). Similar studies and results exist for sexual health and physical health (Patton, Sawyer, Santelli, Ross, Afifi, Allen, Arora, Azzopardi, Baldwin, Bonell, Kakuma, Kennedy, Maho, McGovern, Mokdad, Patel, Petroni, Reavley, Taiwo, Waldfoegel, Wickremarathne, Barroso, Bhutta, Fatusi, Mattoo, Diers, Fang, Ferguson, Ssewamala, & Viner, 2016). As previously noted, there are limitations that need to be addressed to increase effectiveness such as contextual factors affecting effectiveness.

Knapp, McDaid, and Parsonage (2011), when making the economic case for mental health promotion and prevention, provide a more positive picture of intervention effectiveness on issues such as psychosis early intervention, reducing the number of suicides, etc. They focus on evidence-based interventions, but also highlight the importance that for interventions to be cost-effective, they need to have a long-term timeline to show benefits and that programme design and implementation has to address the needs of the population it is meant to serve.

Overall, while there are several examples of evidence-based prevention and intervention programmes addressing different aspects of adolescent health, what becomes apparent is that these efforts need to follow a coordinated, strategic effort implemented by multiple stakeholders working in unison with common targets and goals.

Existing examples of good practice in the areas of adolescent mental health, sexual health, and physical health (e.g., obesity) will be recorded as separate annex in the report. In particular, examples will be provided by COE member states. For instance, the report will describe programmes such as the “There for you” programme implemented in the UK by the Association for Young People’s Health (AYPH) where parents are actively involved in supporting young people with mental health problems; and the Young Advisors Team of the Commissioner for Children’s Rights implemented in Cyprus where a group of thirty (30)

young persons between the ages of 13 and 17, from diverse backgrounds, volunteer in this team by attending meetings or workshops, discussing issues that concern young people and the society at large, and through these actions consult with the Commissioner on their needs and actions needed.

4.2. Cost-effectiveness of present efforts

Masters, Anwar, Collins, Cookson, and Capewell (2017) state that “It is well known that it is financially preferable for healthcare systems to aim to prevent ill health rather than to subsequently treat it” (pg. 833). They go on to assert that numerous studies have calculated the return on investment (ROI) and that their systematic review spanning public health efforts in general results in suggesting that “local and national public health interventions are highly cost-saving” (pg. 827).

When making the case for investing in adolescent health, Sweeny, Rasmussen, Wils, Friedman, Mahon, Patton, Sawyer, Howard, Symons, Stenberg, Chalasani, Maharaj, Reavley, Shi, Fridman, Welsh, Nsofor, and Laski (2017) coordinated financial efforts to address health and wellbeing in adolescence can have high economic and social returns bringing countries closer to achieving the UN’s Sustainable Development Goals and Global Strategy for Women’s, Children’s and Adolescent’s Health. In addition, they report that investments in adolescent health will bring economic and social benefits at “ten times their costs” with effects in areas such as saving lives, preventing unwanted pregnancies, and averting disability. Other areas affected positively by these investments are reduced child marriage, secondary school enrolments, human capital, etc. It is important to note that investments in programmes for girls (e.g., in low-income countries with high gender inequity) might be different to those for boys (e.g., road safety). However, for full economic benefits to become apparent in such cases, a substantial amount of time is required. The authors conclude that large-scale investments in adolescents should be approached from a life-course strategy for health.

Furthermore, Sweeny and colleagues (2017) indicate that the actions need to be taken to scale in countries, and that they differ to those implemented in childhood in terms of settings wherein applied and of time implemented to showing benefit. This is particularly important as adolescent health has been found to be affected by socioeconomic contexts (Viner and colleagues, 2012).

Specific reference to cost-effectiveness relating to mental health, sexual health, and physical health (e.g., obesity) will be described further in the report.

5. The future: prevention/promotion, evidence-based action, and future activity

The Association for Young People’s Health (2017) identified “Ten reasons for investing in young people’s health”:

1. Adolescence is a critical time for health.
2. Adolescent health is not improving enough.
3. Young people are not getting the health services or information they require.
4. Good sexual health services and testing are critical.
5. Teenage pregnancy reduction must continue.
6. Ignoring chronic adolescent disease costs money.
7. Effects of poor health care in adolescence can last a lifetime.
8. Investing in adolescent health has benefits beyond health.
9. Mental health issues are diagnosed at this age.
10. Important new research has brought new insights.

One particular major challenge is addressing the root of the problem, not just the surface. Efforts – prevention or intervention level – tend to address the symptoms of a problem and not the risk factors or causes. For instance, addressing the roots of a problem could take on the role of addressing poverty, housing problems, and marginalization of youth, rather than primarily focusing on providing school-based sexual health education or implementing a violence prevention programme in a high risk neighbourhood (Patton and colleagues, 2016; AYPH, 2017). Improving young people’s health is linked to addressing major challenges related to “social and regional inequalities in health that are cause by economic, social and cultural determinants of ill-health” (European Commission, 2000, pg. 9). Ultimately, efforts need to address the fact that social environments influence behavioural change more than knowledge. If adolescents and their communities are provided with the knowledge – that is the “what” part of the problem – without the resources and support to implement actual changes in their environment – that is the “how” part of the problem – then can we really say that we are addressing the problems and risk factors efficiently and effectively? In addition, if opportunities and resources are limited for adolescents, then how can their emergent capabilities come to fruition?

The “elephant in the room” that results from the reports available, pertains to not having data-driven, national and/or local identified needs guiding the development, adoption, and implementation of prevention and intervention efforts (Patton and colleagues, 2016; AYPH, 2017). Rather, we face efforts where legal and policy reform is almost solely based on the global strategies and guidelines and/or the adoption programmes from one country to the next applying a “one size fits all” approach (Catalano, Fagan, Gavin, Greenberg, Erwin Jr, Ross, & Shek, 2012). Thus, efforts are not customized, effectiveness – cost or otherwise – is compromised, and local adolescent and youth participation in general is hindered. The latter is particularly important when one needs to consider the significance of creating strategies that include socially and economically marginalized youth. In order to have comparable indicators of health, “there is a clear need to improve the quality and comparability of data” (European Commission, 2000, pg. 8). Data ought to cover all aspects of health – mental, social, and cultural – and address structural and cultural factors contributing to the explanation of differences between countries. Thus, comprehensive efforts to address issues could be developed and implemented across the board (Catalano and colleagues, 2012).

With regards to recommendations for change and movement towards a youth-friendly approach, there needs to be a balance between empowerment of adolescents and protection by adult society (Patton and colleagues, 2016). On one hand, there is great value in empowering adolescents into civil action, to have their voices and opinions heard as it is evident that adults don’t necessarily “always know best,” especially given the societal developments that adolescents experience nowadays as compared to in the past. This would also imply a certain level of autonomy in decision-making that can be done when adequate background information and aid in developing decision-making skills are provided. This would mean helping adolescents develop personal agency via developing self-efficacy beliefs and acquiring self-regulatory skills to help them deal with challenges, but also to achieve a healthy transition into adulthood (Zimmerman & Cleary, 2006).

On the other hand, protection is a key aspect of helping adolescents get through the challenges. While a commonly held belief is that the younger one is, the more protection that person needs, it can be argued that adolescents and young people still need a level of protection. For example, it is important to provide protection to older adolescents (ages 18 – 24) who are trying to incorporate themselves into adult society, or to unaccompanied minors (under the age of 24, not only under 18) who have gone through war, trauma, or other adverse experiences.

Societies and governments need to work with adolescents to identify national needs by developing a national research agenda that would guide the development and evaluation of implemented programmes (Patton and colleagues, 2016; AYPH, 2017). Capacity building in professionals dealing with adolescents is of utmost importance. Specifically, there is notable need to provide quality training to the health workforce and to the technical workforce within ministries that provide services to adolescents (e.g., Ministries of Education, Ministries of Health, and Welfare Services). The training would contribute to the development of appropriate packages of services that are multi-level, interdisciplinary, and which would address discrimination issues, quality assurance, age appropriateness, peer involvement, etc. In particular, applying a multi-level approach is crucial for adolescents in order to be integrated and comprehensive. Efforts should pertain to health as a whole; that is pay attention to health-related lifestyles addressing smoking, alcohol and substance abuse, obesity and physical activity, but also pay special attention to mental health issues that affect areas such as premature deaths by accidents and suicides (Patton and colleagues, 2016; AYPH, 2017).

Lastly, the Council of Europe’s Committee of Ministers in 2011 adopted the Guidelines on Child-Friendly Healthcare (COE, 2018). While these provide a well-rounded platform for all children under 18, they could be adapted to an adolescent-friendly context in order to address in a comprehensive manner the unique challenges and opportunities presented by this age group.

More recommendations can be found at:

- Global Accelerated Action for the Health of Adolescents (AA-HA!) Guidance to Support Country Implementation
- WHO Recommendations on Adolescent Health Guidelines (2017)
- The Lancet Commission on Adolescent Health
- International Association for Adolescent Health
- Association for Young People’s Health

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