論文の内容の要旨

論文題目 Adolescent Tobacco Use, Secondhand Smoking Exposure and Factors Associated with Cigarette Smoking and Cessation Intent: a Multi-Country Study.

(若者の喫煙習慣における副流煙の影響と喫煙と禁煙の意思決定の要因に関する多国間研究)

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Background

There are an estimated 150 million young smokers worldwide, and every day 80,000 to 100,000 young people initiate smoking. Moreover, tobacco use has now become the second major cause of death in the world. Tobacco use is linked to a vast range of adverse health consequences including lung cancer, coronary heart disease and other fatal malignancies. Women are a particularly vulnerable population as smoking poses pregnant women at an increased risk of foetal intrauterine growth retardation and miscarriage. Globally, tobacco attributable deaths are anticipated to rise substantially - from 5.4 million in 2005 to 8.3 million in 2030. Alternatively, 5.5 million premature deaths over a 10-year period can be averted if tobacco can be controlled. While strong controlling measures has been successful in reducing tobacco consumption in developed regions, an upward trend has been observed in low and middle income countries (LMICs) where 84% of the world's smokers reside, and where 7 in every 10 smokers are anticipated to die prematurely by 2030.

Tobacco is lethal in any form; also, it is the only legal consumer product that can harm every single individual exposed. Yet, tobacco use is widespread throughout the world and there are a variety of factors behind this: low cost, aggressive and extensive marketing, parental and peer smoking, lack of awareness about its harm among the users, and incoherent public policies against its use.

Furthermore, smoking not only affects those who smoke but also those who inhale the fume. In 2004, 68% of non-smoking adults were regularly exposed to secondhand smoking (SHS) and premature deaths attributable to SHS exposure were estimated to be more than 6 million which corresponds to 0.7%

of the global total disability-adjusted life years (DALYs). Further, proportions of adolescents exposed to SHS have found very high in the European Region both in home (77.8%) and public places (86.1%); high rates were also found in the Region of the Americas and Western Pacific Region. SHS exposure is particularly an important problem in developing countries because most of the countries lack smoke-free laws or laws aren't either implemented or enforced; compliance with the policies is also lacking. Besides, most of the people in developing regions do not know or are not aware about the adverse health consequences of SHS exposure. Specially, the fume exhausted from parental or guardians' smoking at home is extremely dangerous for their children.

In addition, the consequences of tobacco use also extend to massive economic loss due to the death of the main wage earner, large health care costs, productivity loss, and diversion of income to purchase tobacco. This may have a devastating effect especially in LMICs, severely curtailing their economic development and creating a vicious cycle of poverty.

Unless urgent action is taken, the number of smokers worldwide will continue to grow. Also, developing nations are still in the early stages of the epidemic, and they have yet to experience the full impact of tobacco related morbidity and mortality already evident in developed countries where tobacco use has been widespread for much of the past century.

Tobacco use prevention in children and adolescents has been recognized as one of the most important public health agendas by the international community. Tobacco addiction is considered to be a 'paediatric disease' since tobacco use is usually initiated and established during adolescence, so as the dependence on nicotine – children and adolescents tobacco users tend to continue smoking into their adulthood as they become addicted to nicotine. Therefore, the importance of prevention of tobacco use by children and adolescents is based on the fact that tobacco use is unlikely ever to begin if not initiated during childhood or adolescence.

In order to combat the tobacco epidemic, the World Health Organization (WHO) has

established the Framework Convention on Tobacco Control (FCTC), which is a multi-level and multi-sector legal instrument enforcing a broad spectrum of controlling policies under the following core measures: reduction of demand (e.g. price and tax increase, education and training, health warning on packs, banning of advertisements) and supply (e.g. prohibition of tobacco sales to minors, combating smuggling), tobacco cessation support, and protection from SHS exposure by banning smoking in public areas. Despite the legalization of the FCTC, about 95% of the world's population still lacks protection by any major FCTC policies.

Understanding the current trend of tobacco consumption, SHS exposure and cessation intent is therefore crucial to formulate effective policies for the prevention of tobacco use by adolescents in developing countries, which are anticipated to be the hot spots of the future tobacco epidemic. This study aimed to generate knowledge on the current situation of adolescent tobacco consumption and exposure in diversified contexts (5 WHO regions) with a particular focus on determinants of tobacco consumption and intention to quit.

Methods

The objectives of this study were to investigate the prevalence of adolescents' cigarette smoking, cessation attempt, secondhand smoking exposure, and predictors of smoking and cessation in 30 developing countries from 5 WHO regions.

Secondary data analysis was conducted using data from 30 developing countries which participated in the Global School-based Student Health Survey (GSHS) targeting adolescents in grade 6 to 10. The core aim of this survey was to assess and quantify risk and protective factors of major non-communicable diseases. The participated countries were selected voluntarily and the core module of the questionnaire was publicly available. Samples were selected through a standardized two-stage sampling frame. Schools were enrolled with probability proportional to size at the first stage, and sampling for the second stage consisted of random selection of classes containing the majority of 13–15

year old children. Irrespective of their actual age, every student in the selected classes was eligible to participate. Analysis was restricted to 13–15 years so that the comparability and representativeness of the targeted age group can be maintained. The 30 countries included in the analysis were selected based on the availability of the information on smoking. Almost all the samples were nationally representative.

Results

The prevalence of cigarette smoking ranged from 1.91% (India) to 27.3% (Chile), and 0.21% (India) to 35.6% (Chile) in males and females respectively. Among females, the countries with prevalence of over 20% were all from South America (Chile, Colombia, Argentina and Uruguay). Parental smoking, alcohol and drug consumption, insomnia due to anxiety and no parental understanding of troubles and worries were significantly associated with higher risk of smoking in most regions. Female gender, frequent smoking and younger age at first smoking were significantly associated with less likelihood of quit attempt in most regions. Prevalence of exposure to SHS ranged from 36.5% (India) to 84.6% (Indonesia).

Conclusions

Prevalence of adolescent smoking was overall high, particularly among females in South America. Across all regions, adolescents were frequently exposed to SHS. The information on regional determinants of smoking and cessation attempt may help tailor region-specific interventions for tobacco control. In order to halt the youth tobacco epidemic, FCTC may play a key role. Although many developing countries have been ratified with the FCTC policies, implementation and enforcement of the policies is often lacking. The major hindrances to the enforcement in developing countries are complex and many e.g. frequent changes in the ruling parties and the diversified socio-economic background (e.g. education and knowledge). Nonetheless, the FCTC policies, if fully implemented and enforced, will prevent adolescents from smoking and thereby, will avert the associated disability and deaths. Therefore, an intensified international collective action of adaptation, ratification and development of tobacco control policies is urgently required especially in countries where the prevalence of smoking and SHS exposure is high.