SHORT REPORT

The selfie project: a successful approach to lifestyle monitoring and health promotion in adolescents

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Abstract. Adolescence is a critical period for the physical and cognitive development. To promote adolescents' health and well-being, prevention and health education interventions are to be implemented at all levels of society, with schools and families playing a fundamental role. In 2015, the "Semi di Melo" Center for Education and Research on Childhood and Adolescence was established in Milan, Italy, to help parents and teachers to better explicate their supportive role toward their children/students during adolescence. Through an annual survey called 'Selfie', conducted via an internet-based, self-administered, and fully anonymous questionnaire, Semi di Melo collects qualitative and quantitative information on the demographic characteristics, lifestyle, leisure time, risk behavior, social relationships and mental wellbeing of middle and high school students in Italy. Data are then analyzed, interpreted, and shared with teachers, parents, and students during guided workshops and focus groups aimed at raising awareness on risky behaviours and facilitating intergenerational exchange. To date, the Selfie questionnaire has been distributed to more than 400 Italian public schools, reaching more than 90,000 students. In late 2022, Semi di Melo and the University of Pavia started a collaboration to expand research on data acquired from the Selfie questionnaire through an analytical approach, allowing a more comprehensive understanding of Italian adolescents' lifestyle, social, and psychological well-being. The gathered evidence will be made available to help educators, health and social care professionals, as well as local authorities and decision-makers to develop effective support systems and evidence-based interventions that help adolescents realise their full potential. (www.actabiomedica.it).

Key words: Adolescent, life style, health promotion, epidemiological monitoring, health risk behaviors

Adolescence involves rapid physical and cognitive changes that pave the way for the transition from childhood to adulthood (1). Hence, this stage of life is both delicate and full of potential.

In fact, the risks that adolescents exposes themselves to and the lifestyles they adopt will have a long-term influence on their health trajectories, impacting not just their susceptibility to disease but also their mental and social well-being throughout their adult lives (2-4).

Prevention and health promotion interventions targeting teenagers can contribute significantly to

their development into healthy, happy and fulfilled adults (5). However, action is needed at all levels of society, with schools and families playing a key role (2).

In 2015, the "Exodus" foundation (6) and "Casa del Giovane" (7), two Italian organizations that have been engaged for decades in promoting the well-being of younger generations, preventing and treating addictions, and supporting people facing socio-economic disadvantage, gave birth to the "Semi di Melow Center for Education and Research on Childhood and Adolescence (8), in Milan, Italy. The center is mainly concerned with promoting a person-centered model of

education and schooling, expanding research on child-hood and adolescence, identifying and disseminating best educational practices, and implementing educational programs addressing the most fragile subjects in collaboration with schools. In a broader sense, the final purpose is to provide teachers and parents with useful elements to better fulfill their supportive roles toward their students and children during childhood and adolescence.

As part of its research activities, Semi di Melo has been conducting a survey among middle and high school students in several Italian cities for the past seven years. The survey 'Selfie' was developed by social sciences, phycology, and medical researchers; it is internet-based, self-administered and completely anonymous (9). The questionnaire is divided into four different sections, for an estimated 45 minute-long completion. The first section collects information on participants' demographic, socio-economic and educational background characteristics. The second section explores leisure time, relationships with peers and adults, use of money, mobile phone and social media use, and attitudes toward gambling and psychotropic substances. The third section investigates knowledge, attitudes and practice (KAP) on risky behaviors. The last section covers topics pertaining to self-confidence, attitudes and feelings about the body, peer pressure, ability to cope with daily problems, and current and expected degree of satisfaction in different areas of life. Once collected, data are analyzed, interpreted and returned in form of aggregated descriptive statistics, to teachers, parents, and students themselves during guided workshops and focus groups. To date, the Selfie questionnaire has been distributed in more than 400 public schools in the provinces of Milan, Varese, Bergamo, Cremona, Mantua, Pavia, Verona, Ferrara, Perugia, Viterbo, Frosinone, Matera, Cosenza, Potenza, and Caltanissetta, collecting data from more than 90,000 adolescents.

The survey is not intended as an alternative to national and international surveillance systems, but rather to complement them. Indeed, one of the key features of the Selfie project is that it focuses on specific territories and educational institutions, taking into consideration their unique characteristics, offering tailored health promotion programs, and supporting the work of local authorities (10).

Data acquired within the Selfie project between April 2018 and December 2021 on 5,175 students from seven different high schools in the northern Italian province of Varese (mean age: 16 years; 60.7% females; 93% aged less than 18 years) were recently published by Semi di Melo (11): 53.1% of respondents declared having experienced gambling at least once, 12.02% reported smoking daily, 20.95% reported drinking alcoholic beverages at least once a week. Despite the limitations that characterize this type of investigation, these findings support the importance of promoting healthy lifestyles as early as adolescence.

In late 2022, Semi di Melo and the University of Pavia established an operational research collaboration with the aim of expanding research on data acquired from the Selfie questionnaire through an analytical approach. This will make it possible to add value to the great wealth of information acquired by Semi di Melo thanks to its capillary action in a segment of the population that is usually difficult to reach. Investigations will primarily focus on the determinants and trends over time of risky behaviors and psychological distress among adolescents, in order to enrich knowledge about vulnerability factors and obtain information on how to strengthen environmental support from family, school and local institutions. Comparing collected data over time will also make it possible to better understand the impact of new technologies, the COVID-19 pandemic, and local and national policies on adolescent development. As part of the collaboration, the team will also update the questionnaire over time to reflect the most emergent phenomena in this population.

As soon as the evidence gathered from the Selfie questionnaire accumulates, it will be possible to form a comprehensive and detailed picture of the lifestyle, social and psychological well-being of Italian adolescents. We hope that future findings will provide valuable inputs for educators and further research, as well as assist policymakers and local authorities in developing evidence-based interventions and effective support systems to help adolescents reach their full potential.

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