

Project overview

The Choice Foundation



INSAMLINGSSTIFTELSEN

CHOICE

Background

It is well recognized that health is highly related to lifestyle (1–3). There is an on-going rapid increase of non-communicable diseases (NCD), annually killing 38 million people globally. Low and middle-income countries are the most severely affected; they carry approximately 75% of all NCDs. Modifiable risk factors such as harmful use of alcohol, tobacco consumption and unhealthy diets increases the risk of NCD. Marginalized and low income-groups are at the greatest risk of exposure to harmful products (2), i.e. smoking initiation of adolescents is higher among those from disadvantaged settings (3), resulting in an increase in individuals suffering from NCDs, whereas high-income groups have greater protection through access to care and protective services. The World Health Organization (WHO) states that there is a need for a comprehensive approach by all sectors to tackle the burden of NCDs (2). Health promotion, defined as the process of making it possible for people to take control over and improve their health to a greater extent (4), includes health education, which can tackle risk factors, halt progression or even prevent the onset of psychoactive abuse. In order to be efficient, the strategies need to be tailored to the population and cultural context in question (5).

According to the Universal Declaration of Human Rights, health is a fundamental human right. The WHO defines good health as a state of complete well-being, not necessarily in the absence of disease or disability. Health should be seen as a resource for everyday life rather than the purpose of life (6). Health education, described as any learning activity tailored to support individuals and communities to increase their health by influencing their attitudes or increasing their knowledge (7), has been essential in actions to prevent diseases and to promote health during the last century, e.g. in the preventions of NCDs in high-income countries in the 60s and 70s, which was a result of raised awareness of the relationship between health and lifestyle (8). Two main directions of health education developed during this period: *the preventive approach*, which used psychological theories as means to achieve behavioural change; and *the educational approach*, which focused on enabling people to make informed choices. These strategies have been criticised for underestimating social and (6) environmental factors' impact on health status (5), and for 'victim-blaming', by making the individual responsible for their own health while ignoring surrounding circumstances (9, 10), as well as for being successful only among the most educated in society, as personal skills and literacy was assumed to contribute to the capacity to understand the messages (8).

As a result of an increased understanding of environmental factors' impact on behavioural decisions, health education was refined as a tool for disease prevention during the 1980s (8, 9). Programmes were now tailored to support people to develop skills to make positive health behaviour choices. There was an extensive production of theories of behaviour change during this decade, for example the health belief model, the trans theoretical model (11) the social learning theory and the theory of planned behaviour (12) which were used as guides for educational programmes by describing the complex link between action, beliefs, perceived social norms and knowledge (8). The first WHO conference about health promotion was arranged in 1986, resulting in 'The Ottawa Charter' where indirect factors such as public policy,

working conditions as well as personal behaviour were acknowledged as factors impacting on people's health status. The concept of empowerment was emphasised and used to increase people's control over modifiable determinants of health and presented as a way to fight health inequality (4-5, 8).

Despite the progress of interventions, health education has to a large extent failed to reach sustainable behavioural changes (8), however, empowerment models appear to be the most effective approaches in health education (1, 13-14) and seen as an important part of a comprehensive strategy to tackle structural determinants of health, where an increase in health literacy is essential (5). Health literacy means having practical knowledge about bodily functions and signs of dysfunctions, and being able to find and understand information about the condition that has occurred, and how it affects people's actions in terms of health (13). It has been shown that people with limited health literacy have less understanding about the meaning of preventive health measures (15) and their health status is poorer than those with adequate health literacy (16). WHO has stated that School-based health education programmes are important when it comes to affecting young people's health and health behaviour (4, 17).

ANT-prevention intervention has been a part of Swedish education for decades, however there is a decreasing trend in youths' knowledge about ANT. Only half of the school-students reported that they had received ANT-education in 2011, which is a marked decrease since 1980, where roughly 90% reported having received ANT-education, whereas the ANT-education held by teachers at the school appears to be based on low evidence (25). Lack of knowledge can be disempowering (21) and research shows that information-interventions can lead to increased knowledge, but in spite of this, they are not sufficient for a behavioural change among youth (5, 20) and should be seen as an important component of comprehensive prevention programmes. The Swedish National Agency for Education (43) suggests that increasing knowledge about ANT is a task that should be undertaken by schools, and should be included in a general health promotion programme (25).

Methodology

The Choice Foundation offers medical students training in health communication as educators for high-school students in a school-based health education programme, with the aim to increase young people's health literacy. The foundation was founded in 2010, and in 2013 it decided to narrow its focus to ANT prevention, which was motivated by an increased illicit-substance abuse and mental ill-health among high-school students in Sweden. For this purpose, the educational programme TUTCH was developed and implemented aiming to empower young people in school to take control of their health, and to eliminate the impact of ANT in social interaction. The organisation emphasizes the small age difference between the educators and participants as a contributing positive factor in the interaction, where the

medical students can be seen as role models. When accepted to the programme, the medical student will take a one-day course on communication strategies, ANT, and the TUTCH-concept, in order to develop rhetorical skills and increase knowledge of ANT and abuse. After this, the students will be able to start educating; financial compensation is offered for each classroom session they are in charge of (26). The programme consists of three parts. The medical students, invited by high schools to hold two 90-minute teaching sessions in pairs, usually during two consecutive weeks, they teach the students about the body functions and the effect of ANT, based on a predetermined presentation that supports and guides the lecture. Pupils are encouraged to ask questions in order to improve their general health literacy. The third part of the programme is a school assignment where the pupils focus on a subject of their choice within ANT, which they present to their classmates later on, and thereby continue to teach each other about ANT in a peer-based regime (26).

Stakeholders such as the Swedish Ministry of Public Health and Arvsfonden both contributed with financing the intervention to schools, which had a lower health status than others in the country. They also took part of the evaluation schematics and creation of a methodology book, which could be an evidence based foundation for other governmental and municipalities in their work against tobacco usage and health inequalities.

All major cities have one project manager who works as the main coordinator of the region. The coordinator was the main focal point for the hired medical students and facilitated the intervention and contacts between the students and the schools.

Results

The disease burden among young people in Sweden is dominated by injury, premature death due to, among other things, suicide and mental illness. Alcohol, Drugs and Tobacco (ANT) are major contributors to this disease image. According to CAN's annual survey of school drug habits, 79% of high school students have been drinking alcohol in the past 12 months, about 28% of them smoking and 14% of girls and 20% of boys have used drugs (41). Alcohol consumption among young people has decreased since the beginning of the 2000s as well as smoking among boys, however, the proportion of girls who smoke is increasing. Drug use among young people in high school is also increasing.

According to 2014's study of school students' drug habits by CAN (2014), about 20% of boys and 14% of girls in secondary school have tested or used drugs at some point. The National Board of Health emphasizes that increased drug use also increases health differences between the sexes (42). The CAN study also shows that 12% of the students have tried or used drugs in the past 12 months.

The most commonly used drug is cannabis followed by spice. Drugs are readily available to young people and among secondary school students, 36% have been offered drugs and 27% indicate that if they would like they could get cannabis within 24 hours (41). The most common way of getting drugs is reported via boys / girlfriends or friends followed by someone else or a longer, only 3% indicated that

they obtained drugs via the internet in CAN's research on Skolelevers drug habits (41).

TUTCH, Teens Understanding and Taking Control of Health, the Educational Foundation is Choice's education program where medical students work to prevent harmful use of alcohol, drugs and tobacco among schoolchildren. This is done by medical students teaching high school students around the human body and how it is affected by ANT. The education aims at providing the students with the knowledge and motivation they need in order to influence their own habits and behaviours through active, well-founded decisions. In addition, students will reflect on their attitudes and positions regarding alcohol, drugs and tobacco in order to prevent possible future ill health caused by ANT use. Most important of all, is to raise the students' interest in matters relating to the body as a functional unit and how active decisions can affect the risk of future ill health.

The evaluation also aims at investigating whether TUTCH has had a knowledge-enhancing effect among the students who have taken part of the education. The results are also the basis for improving the content and implementation of the TUTCH program. The evaluation is done through a survey. The evaluation polls were developed by the Choice Collection Foundation and aims to collect students' experiences of TUTCH and if it helped students to make knowledge-based decisions about their ANT use and if it affected the students' attitudes to ANT.

The students have learned to a great extent how the body is affected by alcohol, drugs and tobacco. Among the students, 36.8 percent (n = 302) indicate that they fully learned how the body is affected by ANT, 61.8 percent (n = 507) indicates that the corresponding ones learned this to some extent, only three students indicate that they did not learn this. This means that after participation in the TUTCH program 98.6 percent of the students experience that they have fully or partially learned about ANT and its influence on the body. The degree to which this newly acquired knowledge helps adolescents feel that they know enough about ANT and how they affect the body are shown in Figure 1.

	Alkohol	Narkotika	Tobak
Ja, fullständigt	45,7 % (372)	31,9% (259)	43,1% (350)
Ja, till viss del	52,1 % (424)	62,8% (510)	53,0% (430)
Nej, inte alls	0,7 % (6)	3,2% (26)	2,1% (17)
Vet inte	1,5 % (12)	2,1% (17)	1,8% (15)

Figure 1. Percentage of students who think they fully know everything they need to know about ANT and its impact on the human body after the TUTCH-programme (n=821)

According to Figure 1, only 0.7 percent of the students who, after participating in TUTCH, do not feel that they have sufficient knowledge of the influence of alcohol on the body feel that they know what they need to know about the alcohol's impact on the body and 3.2 percent on the drug impact and 2.1 percent on tobacco influence. This indicates that the perceived level of knowledge about the ANT and the body among the students is very high. Whether the students feel that they can apply the knowledge they learned about their own positions about ANT are shown in Figure 2. Overall, 88.9 percent believe that they can, in part or in full, take knowledge-based

decisions about their ANT use after participation in the TUTCH program.

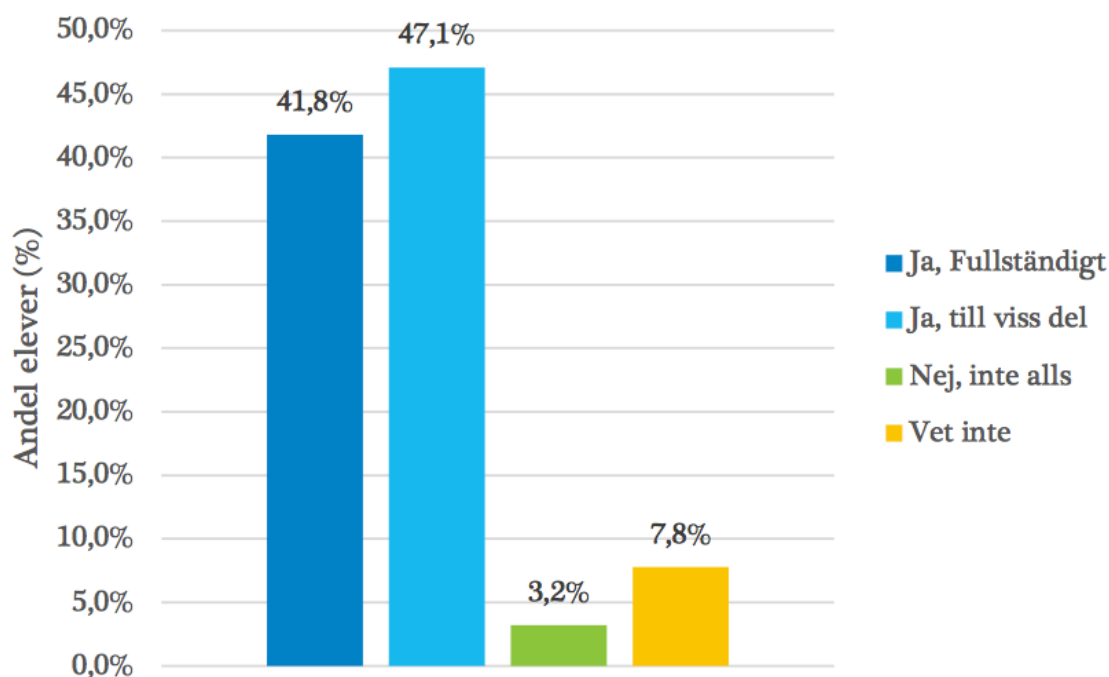
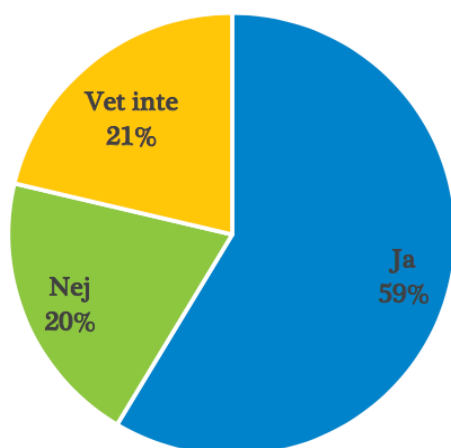


Figure 2. Percentage of students, whom with the help of TUTCH, know that they can take knowledge-based decisions about the own ANT use (n=806).

Of the students, 96.3% (n = 791) indicate that it is important to have knowledge about ANT and their influence on the body. Many students also explain the importance of getting acquainted with this knowledge just in their age as accessibility of ANT increases in high school compared to primary school. Several students also indicate that knowledge about ANT is important especially among those who use ANT regularly.

Figure 3 shows the proportion of students who indicate that the TUTCH program has raised thoughts about their own body and ANT. Thoughts raised by the students about their own body and ANT use indicate that previous use has taken place without reflection on the health consequences explained by the medical students. Weighted thoughts may also indicate possible attitudinal changes to ANT when reassessing the risks associated with ANT use.



Figur 3. Percentage of students who indicate that TUTCH has raised thoughts about their own body and ANT (n=807).

It is clear that high school students think it is important for them to have knowledge about how the body is affected by ANT when 96.3 percent of respondents indicate this. This suggests that, in addition to the young people themselves, the view that ANT prevention efforts are needed and relevant to those as target groups. In addition, 59 percent of students indicate that participation in the TUTCH program has led to thoughts of their own body and ANT use. This indicates that the TUTCH program successfully stimulates students to review and reflect on their own attitudes, attitudes and approaches to ANT

Among the .student students, 88.9 percent believe that they can, in part or in full, take knowledge-based decisions about their ANT use after participating in the TUTCH program. This indicates that the TUTCH program gives students the tools they need to make knowledge-based decisions regarding their ANT usage. The TUTCH program has also caused a reduced desire to try or drink alcohol among 26.1 percent of the students, reduced desire to try or use drugs among 51.3 percent and 49.4 percent for tobacco

According to this evaluation, TUTCH fills its goals of raising awareness among young people about how the body is affected by ANT and affecting students' attitudes to ANT. When TUTCH is applied in high school regular courses, knowledge raising and attitudes are reasonable goals for the initiative (43). Knowledge and attitude impact are two important first steps towards possible long-term behavioural changes. In order to assess the maintenance of the impact of the effort, subsequent follow-ups are required. The result also shows that TUTCH is adapted to the students' knowledge and social context, since the evaluation results do not differ either between the sexes or different grades of upper secondary school, nor are there any clear differences in the results between the different participating countries. For even higher knowledge-raising and attitude-influencing effects, students desire a more varied teaching methodology with video clips and more activities such as debates.

References

1. Marmot M, Allen J, Bell R, Bloomer E, Goldblatt P. WHO European review of social determinants of health and the health divide. *Lancet*. 2012;380(9846):1011–29.
2. World Health Organization. Global status report on noncommunicable diseases 2014 [Internet]. Geneva: World Health Organization. 2014. [cited 2016 Feb 14]; Available from: http://apps.who.int/iris/bitstream/10665/148114/1/9789241564854_eng.pdf?ua=1
3. Hiscock R, Bauld L, Amos A, Fidler JA, Munafo M. Socioeconomic status and smoking: a review. *Ann N Y Acad Sci*. United States; 2012 Feb;1248:107–23.
4. World Health Organization. The Ottawa Charter for Health Promotion [Internet]. Geneva: World Health Organization 1986. [cited 2016 Feb 14]; Available from: http://www.euro.who.int/__data/assets/pdf_file/0004/129532/Ottawa_Charter.pdf?ua=1
5. Green J, Tones K. *Health Promotion: Planning and Strategies*. 2nd ed. London: SAGE Publications; 2010.
6. World Health Organization. Constitution of The World Health Organization [Internet]. Geneva: World Health Organization. 2006. [cited 2016 Feb 14]; Available from: http://www.who.int/governance/eb/who_constitution_en.pdf
7. World Health Organization. Health Promotion glossary [Internet]. Geneva: World Health Organization. 1998. [cited 2016 Apr 16]; Available from: http://www.who.int/healthpromotion/about/HPR_Glossary_1998.pdf
8. Nutbeam D. Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century. *Health Promot Int*. 2000;15(3):259–67.
9. Glouberman S, Millar J. Evolution of the determinants of health, health policy, and health information systems in Canada. *Am J Public Health*. 2003;93(3):388–92.
10. Ryan W. *Blaming the victim*. New York: Vintage Books; 1976.
11. Nutbeam D, Harris E, Wise W. *Theory in a nutshell: A practical guide to health promotion theories*. 2nd ed. Sydney: McGraw-Hill; 2004.
12. Glanz K, Rimer BK, Viswanath K. *Health Behaviour and Health Education*. 4th ed. Health Education. San Francisco: Jossey-Bass; 2008.
13. Adams R, Stocks N, Wilson D, Hill C, Gravier S, Kickbusch I, et al. Health literacy A new concept for general practice? *Aust Fam Physician*. 2009 Mar 1;38:144–7.
14. Maton KI. Empowering Community Settings: Agents of Individual Development, Community Betterment, and Positive Social Change. *Am J Community Psychol*. 2008;41(1-2):4–21.
15. Miller DP, Brownlee CD, McCoy TP, Pignone MP. The effect of health literacy on knowledge and receipt of colorectal cancer screening: a survey study. *BMC Fam Pract*. 2007;8:16.
16. Morrow D, Clark D, Tu W, Wu J, Weiner M, Steinley D, et al. Correlates of Health Literacy in Patients With Chronic Heart Failure. *Gerontologist*. 2006 Oct 1;46(5):669–76.
17. Stewart-Brown S. *What is the evidence on school health in improving health or preventing disease and specifically, what is the effectiveness of the health promoting schools approach*. Copenhagen: WHO Regional Office for Europe. 2006.
18. Carney T, Myers BJ, Louw J, Okwundu CI. Brief school-based interventions and

- behavioural outcomes for substance-using adolescents. *Cochrane database Syst Rev*. 2014;2(2). 3-7 .
19. Koning IM, Vollebergh WAM, Smit F, Verdurmen JEE, Van Den Eijnden RJJM, Ter Bogt TFM, et al. Preventing heavy alcohol use in adolescents (PAS): Cluster randomized trial of a parent and student intervention offered separately and simultaneously. *Addiction*. 2009;104(10):1669–78.
 20. Botvin GJ, Griffin KW. School-based programmes to prevent alcohol, tobacco and other drug use. *Int Rev Psychiatry*. 2007;19(6):607–15.
 21. Ferrer-Wreder L. Framgångsrika preventionsprogram för barn och unga: en forskningsöversikt. Stockholm: Institutet för utveckling av metoder i socialt arbete, Statens institutionsstyrelse; 2005.
 22. Caria MP, Faggiano F, Bellocco R, Galanti MR. Effects of a school-based prevention program on European adolescents' patterns of alcohol use. *J Adolesc Health*. 2011 Feb;48(2):182–8.
 23. Faggiano F, Vigna-Taglianti F, Burkhart G, Bohrn K, Cuomo L, Gregori D, et al. The effectiveness of a school-based substance abuse prevention program: 18-Month follow-up of the EU-Dap cluster randomized controlled trial. *Drug Alcohol Depend*. 2010;108(1-2):56–64.
 24. Lemstra M, Bennett N, Nannapaneni U, Neudorf C, Warren L, Kershaw T, et al. A systematic review of school-based marijuana and alcohol prevention programs targeting adolescents aged 10–15. *Addict Res Theory*. Taylor & Francis; 2010 Jan 8;
 25. Skolverket. Undervisning om alkohol, narkotika, dopning och tobak (ANDT)-en praktisknära litteraturgenomgång. Stockholm: Skolverket; 2013.
 26. Insamlingsstiftelsen Choice. Effektutvärdering av TUTCH-programmet Teens Understanding and Taking Control of Health. Stockholm: Insamlingsstiftelsen Choice; 2015.
 27. Northouse, Laurel Lindhout, Northouse PG. Health communication : strategies for health professionals. third. Stamford: Stamford, Conn.: Appleton & Lange; 1998.
 28. Jarlbro G. Hälsokommunikation-en introduktion. Lund: Studentlitteratur AB; 2010.
 29. Svederberg E, Svensson L, Kindeberg T. Pedagogik i hälsofrämjande arbete. Lund: Studentlitteratur; 2001.
 30. Migration och hälsa. Folkhälsorapport 2009. Stockholm: Socialstyrelsen; 2009.
 31. Eriksson-Sjö T, Cederberg M, Östman M, Ekblad S. Quality of life and health promotion intervention – a follow up study among newly-arrived Arabic-speaking refugees in Malmö, Sweden. *Int J Migr Heal Soc Care*. 2012;8(3):112–26.
 32. Ekblad S. Culture- and evidence-based health promotion group education perceived by new-coming adult Arabic-speaking male and female refugees to Sweden—Pre and two post assessments. *Open J Prev Med*. 2013;03(01):12–21.
 33. Ekblad S, Persson-Valenzuela UB. Lifestyle course as an investment in perceived improved health among newly arrived women from countries outside Europe. *Int J Environ Res Public Health*. 2014;11(10):10622–40.
 34. Laidlaw TS, Kaufman DM, Sargeant J, MacLeod H, Blake K, Simpson D. What makes a physician an exemplary communicator with patients? *Patient Educ Couns*. 2007;68(2):153–60.
 35. Chatterjee S, Choudhury N. Medical communication skills training in the Indian setting: Need of the hour. *Asian J Transfus Sci*. India: Medknow Publications; 2011 Jan;5(1):8–10.
 36. Statens beredning för medicinsk och social utvärdering. Att förebygga missbruk

- av alkohol , droger och spel hos barn och unga En systematisk litteraturoversikt. Stockholm: Statens beredning för medicinsk och social utvärdering; 2015.
37. Folkhälsomyndigheten. Folkhälsan i Sverige - Årsrapport 2014. Stockholm: Folkhälsomyndigheten; 2014. 3 8
38. United Nations. Transforming our world: The 2030 agenda for sustainable development [Internet]. New York: United Nation; 2015. [cited 2016 Jan 14].; Available from: [https://sustainabledevelopment.un.org/content/documents/7891Transforming Our World. pdf](https://sustainabledevelopment.un.org/content/documents/7891Transforming%20Our%20World.pdf). 2015.
39. Brinkman S, Kvale S. Den kvalitativa forskningsintervjun. Lund: Studentlitteratur; 2009.
40. Clark J. Medicalization of global health
41. Centraförbundet för alkohol- och narkotikaupplysning. (2014). *Skolelevers drogvanor. CAN rapport 146*. Hämtad 2017-04-06 från: <http://can.se/contentassets/7c8611100de9446fae9ff5c10a14e9e3/skolelevers-drogvanor-2014.pdf>.
42. Nordens välfärdscenter. (2017a). *Nordisk alkoholfakta: Sverige*. Hämtad 2018-05-03, från <http://www.nordicwelfare.org/sv/popNAD/Nordisk-alkoholfakta/Sverige/>
43. Socialstyrelsen. (2014). *Registeruppgifter om tobaksrökningens skadeverkningar*. Hämtad 2018-05-03 från: <http://www.socialstyrelsen.se/Lists/Artikelkatalog/Attachments/19371/2014-3-4.pdf>