Reducing Health Inequalities in Svit Programme

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Screening efficiently reduces the burden of colorectal cancer in Slovenia

The Svit programme is national organised population cancer screening programme. It's purpose is early detection of bowel polips, precancerous lesions and colorectal cancer by two steps screening procedure. With faecal immunochemical test (FIT) traces ob blood are detected in the stool and all test positive persons are reffered to screening colonoscopy. Slovenia is among the countries with the highest colorectal cancer incidence and mortality, alongside the central European countries. At the start of the screening programme in Slovenia, the incidence of the colorectal cancer among all cancers was placed second after skin cancer and the mortality was placed second after lung cancer. Men have higher burden of colorectal cancer, while they participate in the screening less often.

The colorectal cancer screening best fulfils the standards of justifiability and efficiency among the recommended cancer screenings. After the revision of World Health Organization document Principles and practice of screening for disease in 2008, the criteria includes a commitment of the organized screening to health equality and an involvement of actions to increase access to screening procedure for entire target population.

After the introduction of the Svit programme in 2009 in Slovenia, the years-long trend of rising colorectal cancer incidence start falling in 2010. Age standardised incidence of colorectal cancer in Slovenia is declining both in men and women. The colorectal cancer mortality up to 75 years of age is also decreasing.

The lower socio-economic status is accompanied with greater risk for colorectal cancer

Bigger risk for morbidity and mortality from colorectal cancer in persons of lower socio-economic status is showen in figures of mortality by educational attainment in Slovenia (Picture 4.4). In the period prior to the implementation of the screening programme, men with low educational attainment at the age 25-74 had twice higher risk (RR – Rate Ratio = 1.94, p = 0.006) of death from colorectal cancer than men with high educational attainment. In women, the educatinal gap in mortality is lower than in men. Due to the short period of running the screening programme, it is not yet to expect that the educational mortality inequality would change distinctly. Despite that we observed the reduction of inequality between the observed periods wich is mostly a result of lower colorectal cancer mortality of less educated men and it is not statistically significant.



Figure 4.1: Colorectal cancer mortality by educational attainment in the age of 25 to 74 years in Slovenia

Low education – up to 9 years of schooling, middle education – 9 to 12 years of schooling, high education – more than 12 years of schooling. Source: NIPH, SORS

In the first three screening rounds of the Svit programme, we invited the total target population between 50 and 69 years of age to the screening test every second year. The results of the faecal immunochemical screening tests in the Svit programme show a bigger share of positive tests in men and in women of low educational attainment which predicts higher risk of morbidity from colorectal cancer in the lower socio-economic groups (Picture 4.5).





Source: NIPH, SORS

Threat of increasing health inequalities with opportunistic and organised screening

The numerous studies show that the persons from the weakest socio-economic and vulnerable groups, who have a greater risk for cancer due to their behavioural risk factors and delayed use of healthcare services, participate in the screening programmes less. It is in the poor responsiveness of vulnerable groups to the screening programme where the great threats lie, as the screening programme might even increase the health inequalities on the population level. This threat is greater with the opportunistic programmes, which enable the screening service opportunity for the insured

persons or other chosen groups in the population. The users of opportunistic screening decide for the screening tests based on the information they obtain themselves. Those who are more educated and with higher health literacy have many advantages for informed decision. The absence of the active and organised invitation procedure of individuals and other obstacles undoubtedly increase the socio-economic health inequalities in the response to the offered screening test and, consequently, increase the health inequalities. If organized screening programme does not pay enough attention to different needs of different population groups and does not respond with effective measures it can also increase inequalities.

Proven inequality in response by socio-economic situation

The screening outcomes of decreasing incidence and mortality are conditioned with a large, desired at least 70 percent response rate of the invited population. In England, where they have been actively inviting people to screening tests from 2006, they have been observing that the population from the socially weakest environments have been responding in 35% percent, which is much lower than from the well off environments, where the response rate was 61%. Big differences have been reported in the USA as well, where they have experience from decades of opportunistic screening. It is necessary to monitor the socio-economic inequalities in the screening programmes and search for measures to decrease them.

The Svit programme results show that persons with different educational attainment respond to the screening invitation in different shares.



Figure 4.3: Response rate for the Svit programme FIT testing (age 50–69 years) according to education by screening rounds

Source: NIPH, SORS

The differences in response rate according to the educational attainment of men and women in the first screening round were very big, i.e. in the span from 39.2% in men of low education to 72% in women of high education. Men of high education have 1.7 better response rate than those with low education, and women responded 1.5 better with high compared to low education. Women respond to the invitation better than men and inequality by education is lower in women than in men. In the second and third screening rounds, the inequality in response by education was decreased in both

genders. The differences in response rate are still high, despite decreasing them considerably in the four screening rounds. In the third screening round the inequality in response rate by education in comparison to the first screening round was reduced by 20%. The 9% better response rate of the low educated contributed the most to this reduction. In the third screening round people with low educational attainment have 51% response rate, and those with high educational attainment have 69% response rate. The results in the fourth screening round were further improving (Figure 4.6).

In the target population with secondary or high education the response rate changed less, and in the second screening round it slightly decreased. In the field survey among the non-respondents, which was performed by the Institute for multicultural research, we identified Svit programme's unclear message among the possible reasons behind the decrease of the response rate among the secondary and high educated invited for next screening round. The recommendation that they should be tested every two years and that one negative test does not exclude the development of the changes in the colon over a longer period was not enough explicitely stated and explained.

Very positive is the result showing equality of different educational attainment groups in compliance to screening colonoscopy after the positive result of faecal immunochemical test. In the first screening round the share of performed colonoscopies in the low educated was considerably smaller than in the high educated group. In the next two screening rounds the gap narrows and the difference between low and high educational attainment is no longer statistically significant. Compliance to colonoscopy in all educational groups with men and women is over 90% (Picture 4.7). This points to a great trust in the health system and an important role of the general practitioners and their teams. They know how to inform and advice their patients about the colonoscopy being necessary to clarify the reason for the presence of blood in their stool despite various fears and different loads of confusing information in patients.



Figure 4.4: Share of performed colonoscopies after a positive FIT test in the Svit programme (50–69 years) according to educational attainment by screening rounds

Source: NIPH, SORS

Comprehensive communication in Svit Programme considers different needs of population groups

The programmes must plan and implement special measures to reach less responding groups. We need tailored communication strategies with measures that people understand, accept and adopt to their needs if we want to rise the involvement in the preventive health activities. It is important to search for acceptable and as simple as possible method of screening test for the target population, without adding more than necessary obstacles for participation of the less health literate persons. The findings show that well educated people agree to the more invasive test, if they can expect more reliable result.

The Svit programme communication and promotion is professionally designed on contemporary theories of public communication from the start of the programme. The written strategy has up to the implementation details planned the communication with the public by focusing on the general target populations and especially targeting the harder to reach groups. The programme, as part of the implementation of communication activities, includes methods that were intentionally planned with the objective of reaching less educated, hearing and speech impaired and other language groups.

The excellent role in the improvement of accessibility to the screening is appointed to the Svit programme call centre, which is major information point and patient navigation center after the positive result. They appoint test positive patients for scheduled colonoscopy procedure taking into account patients needs and decisions. Health workers give the phone or e-mail explanation, advice and motivate, thus eliminating numerous communication and information barriers, the healthcare system deriving obstacles and those obstacles arising from fear, distrust and emotional response to procedures and findings.

The programme additionally responded to the smaller response rate of the male population by collaborating with the non-governmental organisations, for example, the fire fighting and hunting associations, where the male population often spends their free time especialy in rural settings. During the programme implementation, the suitability of the materials and methods for reaching bigger participation in the programme was assessed several times, and adjustments and simplifications were introduced. Based on the regular monitoring of the Svit programme indicators, the activities have been directed into the municipalities with poor response rate. These activities are coordinated and implemented by the NIPH regional units with local stakeholders and ambassadors of the Svit programme, who very well recognise the local needs and localy effective promotion methods.

The recognised important influence of the healthcare workers at the primary healthcare level on the individual patients and on public opinion about colorectal cancer screening has still a great potential for achieving better response in screening.

Svit programme managed to reduce the educational inequality in screening significantly but the gender difference remain

Thouthful communication channels, simplified messages and many other measures have reduced the educational inequality in the Svit programme participation. The gap between the low and high educated is still very high. The task of the screening programme is to take care of the inequality gap and to take active measures to reduce health inequalities. One of the principles of the organised screening programme must be that each step of the screening procedure is assessed according to it's influence on health inequalities and that effective measures for reducing health inequalities are developed and introduced as part of the screening programme. Life course inequalities are built from different elements and in case of colorectal cancer screening they present themselves as higher morbidity and mortality in population groups at higher risk.

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