

Cancer screening: EU recommendations and current practice in Belgium

Editorial

by

Van Hal G¹

The concept of screening in healthcare is very complex. Usually, it is said that prevention is better than cure. However, this is not always the case in real life. The researchers of the Belgian Health Care Knowledge Centre have made up an inventory of EU recommendations and current practice in Belgium where cancer screening is concerned. It is a very useful job to compare European recommendations with the daily practice, especially because there is much controversy about the sense of cancer screening. Where breast cancer screening is concerned, there was for example a huge scientific battle on this topic, initiated by Gøtzsche & Olsen (1). Recently, Prof. Michael Weingarten from the University of Tel Aviv held a presentation at an international symposium in Istanbul. He stated that systematic prevention overshoots the mark and that it better could be replaced by ad hoc or opportunistic prevention.

Probably, this controversy is for a great deal caused by the fact that it is very difficult to assess the real impact of a cancer screening programme on the cause specific incidence and mortality. Mostly, the results of Randomized Controlled Trials (RCTs) are seen as the ultimate test for assessing the impact or the lack of impact of a screening programme. However, one could wonder whether an RCT is the best method to assess the impact of a programme which is for a great deal dependent on human behaviour. Contrary to a medical drug, human beings have an own personality and can take decisions. Moreover, there is a contamination in study and control group because not everyone from the study group will attend the screening, while on the other hand a certain percentage of the control group will undergo the screening test. That is the reason why case control studies examining the impact of breast cancer screening programmes, showed much higher reductions in cause specific mortality than RCTs did. Moreover, RCTs are very difficult to execute and there is always a lot of discussion on the 'purity' of the practical implementation and quality of registration of what really happened. It also takes a lot of time before

¹ Centre for Cancer Prevention, Epidemiology and Social Medicine, University of Antwerp, Belgium

Correspondence

Guido Van Hal, Centre for Cancer Prevention, Epidemiology and Social Medicine, University of Antwerp, Campus Drie Eiken, D.R.230, Universiteitsplein 1, 2610 Wilrijk, Belgium
guido.vanhal@ua.ac.be

the results of RCTs are available. In the meantime, new techniques show up, which are possibly better but have not undergone the procedure of a Randomized Controlled Trial.

Cervical cancer screening is recommended by EU, although there was never an RCT which assessed the impact of cervical cancer screening on the cause specific incidence or mortality.

In this issue of the Archives of Public Health, Neyt et al compare the EU recommendations with the current practice in Belgium for colorectal, breast, prostate and cervical cancer.

Where the colorectal cancer is concerned, a pilot project is now being prepared in Flanders by the University of Antwerp. People from three regions in the province of Antwerp, will be invited to take part in the screening, in 2009. The results of this pilot project must allow the Flemish government to take decisions on which method to use to distribute the test kits: by direct mail or via the GP. The EU recommends an investigation of different methods before implementing a large scale screening programme. However, in Wallonia, the Southern part of Belgium, there will not be a pilot project but screening will be implemented on a large scale immediately.

Neyt et al. state in their article that following EU recommendations, individuals at increased risk should not be the target of mass screening programmes but of surveillance through regular medical care. However, the pilot project for colorectal cancer screening in Flanders, will also try to reach first degree relatives of colorectal cancer patients, which makes the study design much more complex.

The pilot project in Flanders will make use of the immunochemical Faecal Occult Blood Test (iFOBT), although from Randomized Controlled Trials there is only evidence that the guajac FOBT (gFOBT) is effective. Nowadays, however, a lot of experts agree that the iFOBT is to be preferred as the screening test for colorectal cancer screening.

Concerning the breast cancer screening, Neyt et al make an appropriate remark when they put forward the so-called diagnostic mammographies (on medical grounds, usually including ultrasound) as one of the main obstacles for reaching a high(er) participation rate for the screening programme in Belgium. Maybe, the National Cancer Plan of minister Onkelinx can be of some help in this respect. The intention of the National Cancer Plan is, amongst others, to pay back all medical costs for those women who belong to the high risk group for breast cancer screening. Moreover, those women who participate in the breast cancer screening and have a positive mammography will be paid back the medical costs of the work-out. This could be an exquisite opportunity to clarify the difference between a screening and a diagnostic mammography to women belonging to the target group. In this sense, the Belgian federal government could contribute one's financial mite to a matter which is within the power of the Communities (Flemish, French and German); namely (secondary) prevention.

At this moment, the distinction between screening and diagnostic mammographies is not at all clear for most of the women belonging to the target group. Often, a diagnostic mammography is

performed where a screening mammography is indicated. When women undergo a diagnostic mammography, this is, however, not registered within the screening programme and as a consequence it does not add to the participation rate, even if the diagnostic mammography was performed in a woman due for screening.

Where the cervical cancer is concerned, Neyt et al grasp the heart of the matter where they state that the absence of a quality assurance programme for Pap smear analysis really is one of the major problems. It even leads to gynaecologists saying that they perform a yearly Pap smear instead of one in three years just to have a threefold possibility that a lesion is not missed by the cytologist. It is obvious that this must end up with a huge overscreening in certain groups (2). Besides, there is, indeed, also an underscreening in other subgroups of women, especially those women who are worse off socio-economically spoken.

Moreover, the system of fee-for-service leads to an overscreening too. The fee when executing a yearly Pap smear instead of a three-yearly exam is three times higher. In fact, in the Belgian situation, there is almost an unlimited possibility to perform Pap smears. The only limit is when the same physician performs two Pap smears on the same day in the same woman. Only in this situation, the Pap smear will not be reimbursed by the Health Insurance System. A similar problem occurs with the mammographies. Radiologists gain more money when they perform a diagnostic mammography than when they perform a screening mammography. This problem is very clearly handled by Neyt et al. where they state that: 'If policy makers want more rational screening practice, they should align evidence-based guidance with the appropriate financial incentives'.

Furthermore, it is very clear that a well functioning registry is of paramount importance. This also includes a linking between the screening data base and the cancer registry.

The article from Neyt et al is also very clear where the quality of screening programmes is at stake. Due to the very specific nature of (cancer) screening, there can be no concession on quality. In the end, in principle healthy people are 'embarrassed' and asked to undergo a sometimes unpleasant medical examination. In such a situation, much harm can be brought about when the screening programme is not of top quality. For that reason, cancer screening programmes should only be designed, implemented and evaluated by experts, taking carefully into account the still unsurpassed, be it meanwhile slightly adapted and complemented criteria from Wilson and Jungner (3-4). In this respect, EU recommendations and quality guidelines can play a very important role.

References

1. Gøtzsche P, Olsen O. Is screening for breast cancer with mammography justifiable? *Lancet* 2000;355:129-34
2. Van Hal G, Putzeys T, Pszeniczko J, Weyler J. Overscreening for cervical cancer in Flanders (Belgium). *Eur J Gen Pract* 1998;4(3):100-3
3. Wilson JMG, Jungner G, The principles and practice of screening for disease. *Public Health Papers* 34. WHO, 1968
4. Andermann A, Blancquaert I, Beauchamp S, Déry V. Revisiting Wilson and Jungner in the genomic age: a review of screening criteria over the past 40 years. *Bull World Health Organ* 2008;86(4):317-9