Why invest in smoking cessation in primary health care in the Republic of North Macedonia?

Policy Brief

Smoking damages the lungs, causes cancer, increases the risk of heart disease, and speeds up brain ageing. Around 20% of smokers will develop chronic obstructive pulmonary disease (COPD), a lifelong condition, which can leave people breathless, fatigued, prone to chest infections and be life limiting. The benefits of quitting start straight away: after just 20 minutes of quitting smoking, the heart rate drop to normal levels; within 2-12 weeks, blood circulation and lung function improve; and in 5-15 years, the risk of stroke reduces to that of a non-smoker. Although the nicotine in cigarettes is addictive, nearly 1 in 5 smokers in North Macedonia has tried to quit. With the right kind of support, people can double their chances of quitting but counselling support to quit and cessation medicine are not easily available and not covered under the national health insurance, making it challenging.

In 2018, through links with the International Primary Care Respiratory Group (UK), the Centre for Family Medicine at Saints Cyril and Methodius University of Skopje collaborated with the University of Birmingham on the 'Breathe Well' research programme funded by the UK National Institute for Health Research. The Breathe Well programme is being implemented in 4 countries - Brazil, China, Georgia and North Macedonia. As part of this programme, the North Macedonian team has conducted one of the first ever randomised controlled trials to test the effectiveness of a smoking cessation intervention delivered by general practitioners (GPs) in primary health care clinics. A total of 1367 participants from 31 GP practices were recruited for this study demonstrating high interest in this life-saving activity.

2785
Cigarettes smoked by an adult per year

An adult smoker consumes on average 2785 cigarettes each year placing North Macedonia in fourth highest place out of 184 countries in the world.

47%
Current smokers

Every one in two adults in North Macedonia smokes tobacco. Alarmingly, 12% of children less than 13 years smoke. Yet, no smoking cessation programmes are currently provided in primary health care facilities.

312,383
Deaths attributed to smoking

Nearly 1 in 2 current smokers will die of their tobacco dependence, that is 312,383 premature deaths of those alive today.

ДЕН 16065М
Costs of tobacco smoking

Ден 16065 million or €262 million is lost due to healthcare expenditures and reduced productivity from early mortality and morbidity caused by tobacco smoking.
Despite high engagement from primary care and interest from smokers, quit rates were lower than expected; the reasons need further exploration.

There may be some additional benefit in offering feedback on CO levels, but it was not consistent across the trial. Therefore the least costly and most effective intervention was VBA alone.

Very few participants spent out of pocket on effective cessation medicine (nicotine replacement gum or patches for example), and for those who did it was very expensive 3000-4000 MKD.

GPs were trained to deliver this intervention and reported willingness to offer smoking cessation support and services in primary care facilities.

The Breathe Well research team engaged with GPs, nurses, and medical students, who were keen and motivated to be part of the smoking cessation movement in the country.

**What did we find?**

Very Brief Advice on smoking (VBA) is an evidence-based intervention designed to increase quit attempts among individuals who smoke. We tested if combining feedback about their lung age (LA) or their exhaled carbon monoxide (CO) levels - higher in smokers - with VBA and support to quit smoking in primary care was more effective compared to giving VBA and support alone.

**We found that:**
- Despite high engagement from primary care and interest from smokers, quit rates were lower than expected; the reasons need further exploration.
- There may be some additional benefit in offering feedback on CO levels, but it was not consistent across the trial. Therefore the least costly and most effective intervention was VBA alone.
- Very few participants spent out of pocket on effective cessation medicine (nicotine replacement gum or patches for example), and for those who did it was very expensive 3000-4000 MKD.
- GPs were trained to deliver this intervention and reported willingness to offer smoking cessation support and services in primary care facilities.
- The Breathe Well research team engaged with GPs, nurses, and medical students, who were keen and motivated to be part of the smoking cessation movement in the country.

**What needs to be done?**

1. VBA is recommended as standard care in primary care in LMIC settings by WHO but there is no strategy in North Macedonia. This study showed that GPs and patients are willing for smoking cessation to be available in primary care. VBA to help people quit is now advised by the WHO as a 'Best Buy' intervention.

2. If interest is to be sustained, GPs will need to be offered incentives such as training and other incentives for providing support to quit tobacco.

3. Further work is needed to identify solutions for success. These are likely to include increasing "quitting" role models such as young doctors.

4. Smokers who use Nicotine Replacement Therapy for smoking reduction are approximately twice as likely to progress to quitting than those who do not. Therefore it is a priority to offer affordable access to cessation medicine for those who smoke 10 or more cigarettes a day.

5. We need to increase the collaboration between the Institute of Public Health and primary care facilities for evidence and capacity building on tobacco cessation services.

6. The Republic of North Macedonia has ratified the WHO's Framework Convention on Tobacco Control (FCTC). Article 14 of the FCTC requires health leaders to develop and implement a national strategy for tobacco cessation. This including the provision of cessation services in primary care, introduction of tobacco cessation in the medical curriculum, and cover the costs of cessation services and medicines under the Health Insurance Fund.

**References:**


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