

## Brief Report

# Adapting Very Brief Advice (VBA) on smoking for use in low-resource settings: experience from the FRESH AIR project

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## Abstract

**Introduction.** Very Brief Advice (VBA) on smoking is an evidence-based intervention and a recommended clinical practice for all health-care professionals in the UK.

**Aims.** We report on experience from the FRESH AIR project in adapting the VBA model and training in three low-resource settings: Greece, Vietnam and Kyrgyzstan.

**Methods.** Using a participatory research process, UK experts and local stakeholders conducted an environmental scan and needs assessment to examine the VBA intervention model, training materials and recommend adaptations to the local context. Two VBA training sessions were piloted in each country to inform adaptation. A final training tool kit was developed in the local language.

**Results.** In each country, the VBA on smoking intervention model remained primarily intact. The lack of a formal smoking cessation system to refer motivated clients in two countries required adaptation of the ACT component of the model. A range of local adaptations to the training resources were made in all three countries to ensure cultural appropriateness as well as enhance key messages including expanding training on nicotine addiction, second-hand smoke and pharmacotherapy.

**Conclusions.** Implementation of VBA requires sensitive, collaborative, local and cultural adaptation if it is to be achieved successfully.

**Trial registration.** Trial ID# NTR5759

**Critical appraisal tools.** The Standards for Reporting Implementation Studies (StaRI) statement: <https://www.equator-network.org/reporting-guidelines/stari-statement/>

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## Introduction

Smoking is the single most preventable cause of death, resulting in an estimated 6 million premature deaths globally per year, with the largest burden being in low- and middle-income countries (LMIC) (GBD Tobacco Collaborators, 2015). Stopping smoking can reduce risk of premature death and improve current and future health (Doll, Peto, Boreham, & Sutherland, 2004; USDHHS, 1990). Advice from healthcare professionals (HCPs) can be one of the most important triggers for a smoker to make a quit attempt (NHS Future Forum, 2012; Stead *et al.*, 2013). The question is how to give this advice effectively without taking up too much time or harming the relationship with patients.

The traditional approach to delivering cessation advice is to focus on informing smokers of the harms caused by smoking and advise them to stop; but recent evidence has shown that offering patients support with quitting is more effective (Aveyard, Begh, Parsons, & West, 2012; West & Fidler, 2011). Compared with no advice, the odds of quitting are 68% higher if stop smoking medication is offered and 217% higher with an offer of support with quitting from HCPs (Aveyard, Begh, Parsons, & West, 2012). In a large study across the whole of England, it was found that smokers were almost twice as likely to try to stop if they had been offered help by their general practitioner (GP), than if they had only been advised to stop smoking (West & Fidler, 2011).

Very Brief Advice (VBA) on smoking is designed to be used opportunistically, in less than 30 s, in almost any situation with a smoker. The VBA model is based upon the PRIME theory of motivation (West, 2006) and has been evaluated as effective in the UK (West & Fidler, 2011). Figure 1 shows the three elements of the VBA model: establishing and recording smoking status (ASK); advising on how to stop (ADVISE); and offering help

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Fig. 1. VBA on smoking intervention (standard UK model).

(ACT). The VBA is designed to promote quit attempts, and in the UK, patients interested in quitting are then referred by their health-care providers to the National Health Service (NHS) local Stop Smoking Service for support with quitting. VBA on smoking is a recommended clinical practice for all HCPs in the UK with more than 55,000 HCPs in the UK trained in VBA (NHS Future Forum, 2012; NICE 2013; NCSCT Statistics, 2018, unpublished).

The acceptability and utility of the VBA model has not been examined in low-resource settings outside of the UK including LMICs. Given the resources to implement the VBA intervention may not be routinely available in these settings, examining methods for adapting the model to local circumstance is important (Murray & Jordans 2016). Local and cultural adaptation, are known to be critical for engaging local stakeholders and increasing the likelihood of an intervention's uptake into practice (González Castro, Barrera, & Holleran Steiker, 2010; Harrison, Legare, Graham, and Fervers, 2010).

### Aim

This report details experience in adapting the VBA intervention and training course content, originally developed in the UK, for use in three low-resources settings: Greece (Island of Crete), Vietnam and Kyrgyzstan undertaken as part of the FRESH AIR (Free Respiratory Evaluation and Smoke-exposure reduction by primary Health Care Integrated Groups) project (<https://www.theipcr.org/freshair>) (Cragg, Williams, Chavannes, & on behalf of the FRESH AIR group, 2016).

## Methods

### Process of adaptation

#### Stakeholder engagement

In each country a lead was identified to support the execution of the Fresh Air project locally. Country leads were asked to engage

with leading academics, clinicians and stakeholders to consider if, and how the VBA intervention and training programme would need to be adapted for use in their country.

### Adaptation of VBA

UK VBA experts provided local experts with an orientation to the VBA intervention model, its principles, supporting evidence and approach to training HCPs. Using a participatory research process, UK experts and local stakeholders conducted an environmental scan and needs assessment to examine the VBA intervention model, training materials and recommended adaptations. Basis for reviewing and adapting VBA on smoking training (Table 1) was provided to the country teams to facilitate adaptation of VBA using a standardised approach. Suggested adaptations to VBA were then discussed with the UK team and agreement reached on how to implement the adaptations, and reflect them in the training courses, without diluting the principles of VBA. UK experts and local teams collaborated on the development of an adapted training course and materials (slides, train-the-trainer guide, participant guide) in the local language that reflected agreed upon changes. Two VBA training sessions were piloted in each country to further inform local adaptation. UK experts travelled to each country to deliver train-the-trainer support and observe the first training session. Following each training session, the need for further refinements was examined. A final set of training materials was developed based on these iterative feedback loops.

## Results

### Adaptation of VBA intervention model for use in low-resource settings

For the most part the VBA model remained intact. A range of local adaptations were made to the ASK, ADVISE and ACT elements of VBA in all three countries to ensure cultural appropriateness and sensitivity.

#### ASK – establishing smoking status

Doctors in each country felt that they had more time to talk with patients about smoking cessation than in the UK where GP consultation times last on average 9 min (Irving *et al.*, 2017). In response to this, a more discussion-based approach to addressing tobacco use with patients, which was more reflective of their respective communication styles, was recommended for the ASK element.

#### ADVISE – on the best way of quitting

Smoking cessation medications are limited in Vietnam, and whilst available in Greece and Kyrgyzstan are not covered by publicly funded healthcare benefits and may be prohibitive as out of pocket costs for many residents. Despite these limitations doctors in all three countries were interested to learn more about pharmacotherapy, for those patients who could afford it.

#### ACT – on patient's response to advice

Smoking cessation support is also limited in parts of Greece and Vietnam, so the focus of the ACT element of VBA was on

**Table 1.** Basis for reviewing and adapting VBA on smoking training

VBA element	Intervention	Rationale	Considerations
ASK	Establish smoking status: e.g. 'Do you smoke?'	Knowledge of smoking status is a prerequisite to any intervention	<p>In the UK VBA is expected to be delivered by every HCP (in primary and secondary care), to all patients, at every opportunity and at least once per year.</p> <ul style="list-style-type: none"> <li>• How should tobacco use should be assessed?</li> <li>• What question(s) should be asked?</li> <li>• Who should ask the question(s)?</li> <li>• Who should it be asked to, and in what setting?</li> <li>• How will smoking status be recorded?</li> </ul>
ADVISE	Advise on the best way of quitting: e.g. 'The best way of quitting is with a combination of behavioural support and medication. We have a local, friendly stop smoking service who are experts in this and I can refer you if you'd like?'	In the UK, knowledge about the harmful effects of smoking is high and so there is no need to advise smokers that smoking is harmful. Additionally, a meta-analysis revealed that offering advice without the offer of support did not prompt quit attempts.	<ul style="list-style-type: none"> <li>• Does this element need to include information on the harmful effects of smoking and the benefits of cessation, and what information is most relevant to patients?</li> <li>• What smoking cessation resources are available to supplement the advice?</li> <li>• How should this question best be phrased?</li> </ul>
ACT	Act on patient's response to advice: e.g. by either: (a) facilitating referral to the local stop smoking service, or alternative support (e.g. prescribing or referring to a pharmacy or doctor with appropriate recommendations); (b) making a note in their medical records that VBA has been delivered if they do not want to quit.	Referral to a specialist stop smoking service is preferred as it is the most effective method of quitting, but self-help materials can be used. Recording that VBA has been delivered is a prompt to the health professional that they need to deliver it again at the next appropriate contact with the patient.	<p>VBA is designed to prompt quit attempts, not to assist with those attempts.</p> <ul style="list-style-type: none"> <li>• If referral for support isn't available then could support be offered by the healthcare worker: prescription (what medications are available), face-to-face, written support materials, website, quitline?</li> </ul>

behavioural support, followed by medication and when available referral to specialised cessation support in these countries.

### Adaptations to VBA training programme and materials

Adaptations to the VBA training reflected agreed upon changes to the VBA intervention model, but also what local stakeholders thought was important for trainees in terms of content, key messages and format of delivery. Adaptations across the three countries are summarised in Table 2, with several similarities documented across countries.

In all three countries, there was a need to enhance key messages and expanding training content regarding nicotine dependence which was felt to be critical in engaging HCPs and increasing both motivation and empathy in their consultations with patients who smoke. In Vietnam, three key messages were added to the training to reinforce the chronic relapsing nature of smoking (Box 1). These key messages were also subsequently adopted by the team in Kyrgyzstan.

In Greece, adaptations also included ensuring factual details about health effects of smoking, data on prevalence and profile of local tobacco users and links between smoking and mental-health illness. Local HCPs reported that talking about smoking can be challenging in Greece (Crete), because locals often be a lack of concern for personal health and that a more conversational

style of communication would be more accepted by patients. Therefore, a second method for how to ASK patients was included in the training that reflected the local communication style.

In Vietnam, the scarcity of behavioural support for smoking cessation, and the inability of many smokers to access stop smoking medications, led to additional content on evidence-based behavioural support techniques being added to the ACT element of the training.

In both Greece and Kyrgyzstan, there is no official national strategy to promote and support tobacco cessation or provide tobacco dependence treatment. Nevertheless, some cessation support is available, though GPs are not necessarily aware of it. To support the ACT element of VBA, the trainers included more detailed information about behavioural support, medications and when available referral information for local quit smoking services.

### The art of implementing VBA in low-resource settings

Experience from the FreshAir project also highlighted that there are some key components of successful implementation, which go beyond adapting the physical teaching and learning resources. Successful implementation of the VBA on smoking intervention requires a shared vision, strong leadership, the identification of a core multidisciplinary team of enthusiastic trainers, who are credible by virtue of their clinical roles, and perhaps most

**Table 2.** Adaptations to VBA training intervention across three low-resource countries involved in the FRESH AIR project

Adaptation	Greece	Vietnam	Kyrgyzstan
Addition of national data on tobacco use and burden of tobacco use	X		X
Enhancement of health effects of tobacco use content			X
Addition of risk of exposure to second hand smoke	X		X
Enhancement of key messages and content on nicotine addiction and mechanisms of tobacco dependence	X	X	X
Addition of information on link between tobacco use and mental health illness and challenges this poses	X		
Offering suggestions on the communication style which may be used when delivering the VBA intervention or order that it fits with the local norms	X	X	X
Enhancement of training on quit smoking pharmacotherapy	X	X	X
Addition of information on local quit smoking services	X		X

**Box 1.** Adaptation of key messages on the mechanism of tobacco dependence developed by Vietnam partners and used in Kyrgyzstan

## Key messages:

1. People start smoking for various reasons, they continue to smoke because of dependence upon nicotine
2. Dependence is a disorder of motivation. People relapse not because they 'want' to go back to smoking, but because they suffer from repeated powerful motivations to smoke
3. How dependent people are does not matter in terms of VBA, the fact that they smoke or not is the key feature. Level of dependence affects the chances of success and thus the amount of support required

importantly a team, which is fully engaged with the learning material. The important task of transporting novel evidence-based healthcare interventions from one diverse setting to another requires the delicate interplay between all of these elements.

## Conclusions

Adaptation to the VBA training intervention is possible and small changes can be made to whom VBA is delivered by and too, and how the conversation with patients is framed, to ensure that HCPs are comfortable with the intervention. There were cross-country similarities documented including interest in expanding key messages and sections of the training. In countries where there is a lack of national or local supports for clinicians to refer to there is need to discuss alternative approaches for the ACT element of the model.



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**Ethical standards.** The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008.

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