ARTICLE OPEN

Barriers to the provision of smoking cessation assistance: a qualitative study among Romanian family physicians

Catalina Panaitescu¹, Mandy A Moffat², Siân Williams³, Hilary Pinnock⁴, Melinda Boros⁵, Cristian Sever Oana¹, Sandra Alexiu¹ and Ioanna Tsiligianni^{6,7}

BACKGROUND: Smoking cessation is the most effective intervention to prevent and slow down the progression of several respiratory and other diseases and improve patient outcomes. Romania has legislation and a national tobacco control programme in line with the World Health Organization Framework for Tobacco Control. However, few smokers are advised to quit by their family physicians (FPs).

AIM: To identify and explore the perceived barriers that prevent Romanian FPs from engaging in smoking cessation with patients. **METHODS:** A qualitative study was undertaken. A total of 41 FPs were recruited purposively from Bucharest and rural areas within 600 km of the city. Ten FPs took part in a focus group and 31 participated in semistructured interviews. Analysis was descriptive, inductive and themed, according to the barriers experienced.

RESULTS: Five main barriers were identified: limited perceived role for FPs; lack of time during consultations; past experience and presence of disincentives; patients' inability to afford medication; and lack of training in smoking cessation skills. Overarching these specific barriers were key themes of a medical and societal hierarchy, which undermined the FP role, stretched resources and constrained care.

CONCLUSIONS: Many of the barriers described by the Romanian FPs reflected universally recognised challenges to the provision of smoking cessation advice. The context of a relatively hierarchical health-care system and limitations of time and resources exacerbated many of the problems and created new barriers that will need to be addressed if Romania is to achieve the aims of its National Programme Against Tobacco Consumption.

npj Primary Care Respiratory Medicine (2014) 24, 14022; doi:10.1038/npjpcrm.2014.22; published online 10 July 2014

INTRODUCTION

The overall prevalence rate of smoking among the Romanian population aged over 15 years is approximately 27%, with a higher prevalence among men.¹ According to the World Health Organization (WHO), 77% of all deaths in Romania in 2008 were caused by diseases for which tobacco smoking is the main risk factor.¹ Smoking cessation prevents and slows down the progression of major diseases such as cardiovascular and respiratory disease, cancer and diabetes.^{2,3} Family physicians (FPs) are uniquely placed to intervene with patients who use tobacco and support cessation.⁴ However, studies show that smokers who visit their primary care physician for reasons other than smoking are rarely offered assistance to quit or even the minimum intervention of 'brief advice'.^{5,6}

Until recently, smoking cessation support services were not available in Romania. In 2005, after the WHO Framework Convention was ratified, specific legislation began to be adopted. In 2007, the Ministry of Health initiated the National Programme Against Tobacco Consumption, which included the Stop Smoking support programme. This offered free training to any doctor interested in providing smoking cessation support for their patients and financial incentives to become part of a national network of centres where smokers could be offered free counselling and medication.⁷ However, few FPs engaged with,

or referred patients to, the programme: e.g., the main author (CP) was the only FP (from a total of 11,000 physicians in Romania) involved in the programme over a 2-year period. The reasons why FPs did not utilise this programme are unclear.

Several studies describe the professional behaviour of Romanian FPs towards smokers and highlight the lack of engagement in smoking cessation activities. In one study, more than 70% of FPs knew about smoking cessation, but less than half applied this knowledge in their own practices. In the less than half applied to be limited to brief advice for patients with a diagnosed concomitant chronic disease, and few FPs referred patients to smoking cessation specialists. None of the studies explain why Romanian FPs find it difficult to engage in smoking cessation with patients and provide support services for them.

This study aimed to identify and explore the perceived barriers that prevent Romanian FPs from engaging in smoking cessation with patients. Once these reasons are understood, specific interventions can be developed to help FPs provide these services.

MATERIALS AND METHODS

A qualitative study was undertaken during 2011–2012. Written, informed consent was obtained from all participants. As the study evaluated the professional use of a service, and did not involve patients or the use of patient data, it did not require ethical approval by any of the Romanian

¹Family Medicine Solo Practice, Bucharest, Romania; ²Division of Medical and Dental Education, University of Aberdeen, Aberdeen, UK; ³International Primary Care Respiratory Group, London, UK; ⁴Allergy and Respiratory Research Group, Centre for Population Health Sciences, University of Edinburgh, Edinburgh, UK; ⁵Psychotherapy Solo Practice, Bucharest, Romania; ⁶Agia Barbara Health Care Centre, Crete, Greece and ⁷Department of General Practice, University Medical Centre Groningen, University of Groningen, Groningen. The Netherlands.

Correspondence: C Panaitescu (catalina_panaitescu@yahoo.com) Received 16 March 2014; revised 3 May 2014; accepted 6 May 2014





ethical committees. We used the complementary methods of focus groups in which participant interactions facilitate expression and development of ideas and help identify cultural norms, ¹⁰ and subsequent individual semistructured interviews in which specific topics raised by the groups can be explored in depth. ¹¹

Change to the original protocol

To facilitate FPs' participation and funding of venues in this very low-budget project, we originally planned four focus groups sponsored by a pharmaceutical company. However, in the first group, a pulmonologist who had spoken at a preceding promotional meeting attended and actively participated in the discussion, which significantly appeared to influence/inhibit the FP participants' expressed opinions. Despite the financial implications, we therefore decided to concentrate on (unfunded) interviews rather than arrange further (sponsored) focus groups.

Participants

A purposive sampling strategy was used to recruit experienced, licensed FPs to represent a diversity of urban (Bucharest) or rural (Ilfov, lasi and Bihor counties) or practice arrangements (solo/group, deprivation status), personal characteristics (gender, age) and perspectives on smoking cessation services. In addition to this maximum variation approach we also sought FPs with diverse attitudes to smoking cessation (specifically including outliers), or used snowballing techniques to identify people with relevant roles or deemed to have particular perspectives.¹²

Participants for the sponsored focus group were identified and approached by the pharmaceutical company representatives who were asked to include FPs with different age/gender profiles and from diverse demographic practices. The interviewees were identified and invited verbally by CP through local networks, and during conferences and professional meetings, with 'snowballing' to extend recruitment to others potentially able to contribute a range of perspectives. Note was made of the practice arrangements (solo/group) and demography (urban/rural) to support purposive sampling. We continued to recruit until we reached data saturation: i.e., until the interviews presented no new ideas or perspectives related to the aim of our study (to explore the perceived barriers that prevent Romanian FPs from engaging in smoking cessation with patients). ¹³

Data collection

The focus group and interviews were based around a topic guide (Supplementary Appendix 1). Open-ended questions aimed to identify FPs' perceptions (e.g., importance of smoking as a health problem), attitudes (e.g., Is smoking cessation an essential task for primary care?), behaviours (e.g., How do you normally deal with smokers in your practice?) and their individual experiences, opinions, knowledge and willingness to use smoking cessation options.

The focus group, facilitated by CP and MB (female FP (CP) and psychologist (MB)), lasted for 45 min and was audio-taped and transcribed verbatim. Interviews (conducted by CP) lasted for 20–30 min and were conducted face-to-face or by telephone (to enable participation of professionals working in rural areas). Budgetary restrictions precluded the purchase of recording equipment and full transcription of interviews, but comprehensive notes, taken by CP during and immediately after the interviews, provided a contemporaneous record. This included some verbatim quotes, as well as representative words and phrases, which were then typed out for analysis.

Data analysis

Data were stored as Word documents (Microsoft, Redmond Washington) and analysed manually by CP using highlighter pens, summaries and Word tables. The limited budget precluded the use of qualitative data software. Thematic analysis was used to explore key areas of interest, such as perceived barriers and attitudes to providing or referring smokers to smoking cessation support¹⁴ (see Supplementary Appendix 2 for the coding structure). We specifically looked for novel or unexpected insights and actively sought deviant cases. ¹⁵ Responses from FPs in both rural and urban areas were compared to look for different experiences among participants. Analysis was carried out in Romanian with quotations translated for dissemination (original quotations are available on request from the author). The researchers (CP, MAM, CSO and SA) frequently discussed the emergent findings. Preliminary themes were presented

at meetings with colleagues, and the discussion enabled emerging findings to be interpreted, iterative changes to topic guides agreed, and overarching themes to be identified and formulated.

RESULTS

Forty-one licensed FPs (4 male; 32 between the ages of 45 and 60 years) were recruited to the study. With one exception, all the FPs were self-employed and worked in solo practices—the most common professional arrangement in Romanian primary care. One FP worked in a private medical centre. Ten FPs participated in a focus group and 31 took part in semistructured interviews, seven of whom were interviewed by telephone.

Overview of findings

Five barriers to provision of smoking cessation advice in family practice were identified:

- Limited perceived role for FPs
- Lack of time during patient consultations
- Past experience and presence of disincentives
- Patients' inability to afford medication
- FPs' lack of training in smoking cessation skills

Limited perceived role of FPs

All FPs reported seeing patients daily in their offices who smoked. However, FPs perceived themselves to have a minor role in discussing cessation with patients. The strong sense of a medical hierarchy underpinned a perception that the FP's role should be to refer patients to specialists (e.g., pulmonologists or psychologists) rather than be fully involved in supporting cessation. If they were to engage in smoking cessation with patients, FPs said they would prefer to do this as part of a team and be supported in their practice by specialists, especially pulmonologists. The pulmonologist was not only perceived as 'being trained' and thus having the expertise to provide smoking cessation support, but their advice was considered to carry more weight.

It is different when a pulmonologist tells you that you have COPD and therefore you have to guit...

(FP 3, focus group)

Some FPs highlighted that psychiatrists were perceived as being reluctant to engage in smoking cessation with their psychiatric patients and, by example, this was seen as discouraging FP involvement in smoking cessation.

Smoking cessation was recognised as important by the majority of FPs and was typically described as 'a disease' and 'a public health problem'. In contrast, an FP who was an ex-smoker and who had quit without external help believed stopping smoking to be a 'question of personal will power' (FP 10, focus group) and did not perceive a role for the FP or any other doctor in influencing a patient's motivation to quit. Similarly, another FP stated:

Smokers who really want to quit don't need any help; those who look for it [help with smoking cessation] are not convinced.

(FP 5, focus group)

Most FPs believed their role was to offer brief advice, usually to smokers with smoking-related pathologies, rather than to 'healthy' asymptomatic smokers:

You should not smoke, especially with your heart condition. (FP 27, interview) When asked how they thought they should be involved in reducing the number of patients who smoked, many participants said they thought they could be more 'persuasive' or 'forceful' in highlighting the harm caused by smoking.

Most participants considered smoking cessation important not just for the individual smoker but also for society. Some FPs suggested that more support should be available from the government or community—e.g., public campaigns, special programmes supported from a 'tax on vice' and free quit phone lines. The majority of FPs interviewed had heard about the Stop Smoking programme, mainly from the media. However, none had sought further information for their clinical practice.

Lack of time during patient consultations

All participants reported a lack of time as the main barrier to supporting smoking cessation:

Sometimes I have the impression that the patient would like to stay for a prolonged discussion on that subject [smoking cessation], but I always feel 'haunted' by those in the waiting room. So I usually ask the patient to make another appointment for this problem which, I must admit, seldom happens.

(FP 27, interview)

Another identified reason for time pressure was the complexity of consultations in family medicine, which often have to address more than one health problem, accompanied by increased paperwork, described by most participants as 'overwhelming'.

Past experience and presence of disincentives

A lack of motivation to engage in smoking cessation with patients was found to stem mainly from concern about the doctor–patient relationship and also the lack of any financial incentive to participate in such work.

The doctor-patient relationship was seen to be at risk if the patient was perceived to be uninterested in discussing smoking.

I have patients who smoke but visit me, for example, for a bout of the common cold. When I ask if they still smoke, most become defensive and irritated. It's as if they would like to tell me to treat their cold but keep out of their personal lives.

(FP 22, interview)

Some doctors admitted that they had, on occasion, made concessions to patients to keep them 'on the practice list'. If they felt the patient had no interest or appeared uncomfortable when their smoking habit was raised, the FP retreated from the subject and avoided addressing it in future.

Another identified risk was that of jeopardising follow-up visits, especially if the patient had started smoking again. One FP shared an experience where engaging in smoking cessation had a negative impact on care for the patient's other issues:

I had a woman patient with diabetes and hypertension who tried to stop smoking and who disappeared for several months. She missed all appointments. When she finally reappeared, she admitted she was too ashamed to tell me she couldn't manage to stop [smoking]. She had not been treated for her diabetes and hypertension for some time. To tell you the truth, I prefer to have her condition balanced and under control with the other parameters even if she is still smoking!

(FP 7, focus group).

Finance was another factor that affected FPs' motivation to engage in smoking cessation with patients. All FPs reported that specific payments for the service would be a highly motivating

factor (Romanian FPs have a low annual income. The budget of the entire health-care system made up just 3.6% of the Gross Domestic Product in 2011).¹⁶

An FP's personal experience could have a powerful effect on their motivation to engage in smoking cessation with patients. One FP recounted at some length how a patient for whom they had prescribed smoking cessation pharmacotherapy had developed depression. According to the psychiatrist who treated the patient, the depressive episode had been associated with the administration of the smoking cessation drug. The FP said the incident was the reason she would never initiate smoking cessation therapy again.

Another FP told a dramatic narrative about her residency training in a psychiatric hospital. One day she had found herself in fear of physical assault by a violent patient. She managed to calm him down by offering him a pack of cigarettes; at the time, the hospital rules were that each patient who smoked should be supplied with a cigarette ration 'on the house'. The FP believed the packet of cigarettes saved her life, and from then on decided not to intervene in this aspect of her patients' lives.

Patients' inability to afford medication

Barriers from the patients' perspectives were also identified by FPs. Many highlighted the cost of pharmacotherapy as a barrier. The Stop Smoking programme only offered free counselling and medication to those smokers enrolled in it, but was beset by accessibility and recurrent financial problems. FPs said they felt 'frustrated' and 'helpless' when treatment was delayed or abandoned because of cost. Cost was considered to be a key reason why patients relapsed during a cessation attempt:

The trust that the patient has in me and in himself or herself is seriously altered and I often think twice before I start all over again, even if the patient is willing to try again.

(FP 16, interview)

Participants often used their own personal observations and judgements of the patients' socio-economic status to decide whether the treatment was affordable rather than directly asking the patient.

Some doctors also mentioned the geographical barriers: e.g., rural pharmacies did not always stock smoking cessation aids.

FPs' lack of training in smoking cessation skills

During the focus group and interviews, questions that explored the FPs' professional knowledge received a variety of responses. The need for additional training was universally acknowledged. The general lack of education about smoking cessation during undergraduate and postgraduate training was highlighted, as well specific uncertainties about pharmacotherapy.

They [courses] would be welcome because neither during the university nor later, nobody teaches us.

(FP 11, interview)

You know, all this tobacco related stuff is relatively new (...) so, as long as people are interested in quitting, yes, training is welcome.

(FP 31, interview)

I have heard, of course, about nicotine gum, varenicline and electronic cigarettes, but I am not very sure which should be prescribed to whom.

(FP 8, focus group)



Many participants agreed that they felt unprepared, especially when they had to assist patients who had relapsed. One FP expressed their frustration and uncertainty about how to help 'the type of patient, who has tried everything? No matter what you say to the smoker, he has already tried and decided it will not work'. (FP 2, focus group).

DISCUSSION

Main findings

To our knowledge, this is the only study exploring the perceived barriers that prevent Romanian FPs from engaging in smoking cessation with patients. Our findings are consistent with previous international studies that report FPs' lack of time and training in smoking cessation skills as barriers. Romanian FPs do not perceive the provision of smoking cessation services to be part of their work and therefore limit their advice to patients with smoking-related conditions. FPs' past experience, patients' ability to afford medication and the presence of disincentives were important barriers. Although not unique to Romania, the barriers identified appear to be exacerbated by a relatively hierarchical and underfinanced health-care system.

Strengths and limitations of this study

Our qualitative methodology allowed us to explore the perceptions, opinions and personal experiences of the participants. Our purposive sampling enabled recruitment of participants from various regions of the country and different demographic areas (urban and rural). We recognise that we may not have accessed all possible opinions (for example, although the preponderance of female participants is broadly representative of the gender balance of Romanian FPs, young FPs were under-represented in the study). However, we achieved data saturation with respect to our aim of identifying and exploring perceptions about barriers to engaging in smoking cessation.

This was a low-budget project that accepted pharmaceutical company sponsorship to fund invitations and a suitable venue for the focus group as a strategy to encourage more FPs to attend. However, after concerns that the data may have been influenced during the sponsored focus group meeting, a decision was taken to collect further data by individual interviews conducted face-to-face, or by telephone¹⁷ to reduce travel costs. Although the potential bias in the data from the sponsored focus group is a limitation, the undue influence of the pulmonologist contributed to our understanding of the influence of hierarchical structures in the Romanian health-care system. We have systematically identified quotes from the focus group to enable appropriate interpretation.

An important limitation is that we did not have the resources to audio-record and transcribe the interviews as we had intended to do with four sponsored focus groups. However, detailed notes were taken by CP during and immediately after the interviews so that relevant data were recorded and could be referred to during the process of coding and analysis. Although this reduced the number of verbatim quotations available for analysis, it should not have affected our overall understanding of the content of the interview.

Interpretation of findings in relation to previously published work Our study found that medical support for smoking cessation is hampered at primary care level by common barriers, ^{18–23} which, in the context of the Romanian health-care system, acquired some specific aspects. Two overarching themes that encumbered each of the identified barriers were (i) hierarchy, and (ii) time and resources.

(i) Hierarchy. The Romanian health-care system is a hierarchical one and this manifests at different levels:

FPs' relationship with other specialists: FPs appeared to underestimate their role in smoking cessation provision, thinking that they should refer a patient to a specialist rather than take responsibility themselves. This lack of confidence and sense of inferiority compared with secondary care has been found in primary care studies in other countries. ^{24–26} The FP who believed a psychiatrist blamed her for causing a bout of depression reflects this issue. The FPs who preferred support from specialists, especially pulmonologists, as part of a team involved in smoking cessation services could be another subtle reflection of the same issue.

FPs' relationship with patients: In Romania a significant hierarchy exists between the doctor and the patient. This was mirrored in some of the language used by FPs—e.g., 'You should not smoke', '...too ashamed to tell me she couldn't manage to stop [smoking]'.

There is an additional factor that influences the FPs' decision on whether or not to approach smoking cessation. In Romania, payment for primary care is based 80% per capita and 20% feefor-service. (Since April 2013, this has been changed to 70 and 30%, respectively.) This means that the number of patients on an FP's 'list' is directly related to income so that some of our participants said they were reluctant to bring up the topic of smoking cessation with an uninterested patient for fear of losing them from their list.

FPs' relationship with policy makers: FPs' relationship with policy makers is another way the hierarchical theme manifests and may explain the limited input and lack of initiative shown by FPs in the study. Several FPs expected public campaigns or special programmes to be organised by the government. When asked how FPs could advertise smoking cessation for patients, there were no suggestions, not even the provision of an 'information only' approach—e.g., posters or leaflets in the waiting room with support service telephone numbers. ^{27,28}

The lack of reimbursement might also give Romanian FPs a negative perception on the policy direction and the importance that is given to their contribution to the smoking cessation assistance.

(ii) Time and resources. A lack of time and shortage of resources are common complaints in primary care, ^{29,30} made more difficult by the complexity of consultations in family medicine. ^{31,32} In the context of Romanian family practice, this is exacerbated by specific practical issues: lack of affordable administrative staff, overload of administrative and fiscal data collection to be recorded for every patient on each consultation and the redundancy of documents that must be submitted to different health-care institutions.

The way in which appointments are scheduled, without the aid of a receptionist, patients' expectations of 'walk in' appointments and the fact that family medicine offices are usually shared with other FPs (two shifts per office) limit the flexibility for lengthening patient consultations.

Participants working in rural areas appeared to have more scheduling problems than those in urban areas, particularly FPs serving scattered populations whose patients' visits to the office are often dependent on public transportation schedules (e.g., on occasion, many patients arrived at the FP's office at the same time).

The problem of patients who cannot afford prescriptions is not unique,^{33–35} but the economic circumstances in Romania make the problem worse. (The Stop Smoking programme only offered free counselling and medication to those smokers enrolled in it.) In Romania, there is no health insurance cover for cessation drug



therapy, and hence purchasing pharmacotherapy is an outlay that some smokers find difficult. The market price is considered too high compared with the average personal income of the population, especially in rural areas. For example, a loaf of bread costs 0.50 Euros compared with 6-7 Euros for nicotine gum (30 pieces of 2 or 4 mg), 14 Euros for nicotine patches (16 pieces), 35 Euros for bupropion (60 tablets) and 37 Euros for varenicline (28 tablets). The average price of one pack of cigarettes in Romania is about 3 Euros (and even cheaper on the black market). It is cheaper to smoke than it is to buy smoking cessation drugs.

Implications for practice, future research and policy

This study shows that FPs are aware they are an important 'access point' to smoking cessation counselling for patients even if they underestimate the importance of their role. FPs said they saw smokers 'every day' in their office, suggesting that they pay attention to the smoking status of their patients, even if they do not engage them in discussion about cessation. Most participants knew about the pharmacological options of smoking cessation drug therapy on the Romanian market. These findings could be useful when designing future training programmes, which, as well as covering basic clinical knowledge, should focus on strategies to overcome the identified barriers.

For instance, to overcome the barrier of hierarchy in the relationship with other specialists, FPs' training needs to include discussions about their role—and possibly confidence building and assertiveness training...

Improving motivational interviewing skills that help determine patients' willingness to quit, and responding with appropriately matched smoking cessation approaches, would enable FPs to successfully deal with potentially frustrating and demotivating situations (for both doctor and patient) and avoid 'abandoned cases'. It could also lay the foundations for a more evidence-based approach to patients—e.g., relying more on guidelines and less on previous negative personal experiences.

Locally tailored guidelines may also be needed to fit the specific health-care context, focusing on brief advice³⁶ as a practical approach to patients who smoke in typical primary care consultations.

Teaching evidence-based management strategies such as flagging smokers' medical files³⁷ or, more ambitiously, devising better scheduling systems could also prove useful in order to accommodate patients on a walk-in basis and yet still have available time to offer stop smoking counselling.

Despite the progress achieved in many departments of the health-care system, Romania continues to have one of the highest standardised death rates from non-communicable diseases, many of which have smoking-related causes.³⁸ With only a fraction of the public health-care spending of other EU countries¹⁶ and resources channelled mainly to secondary care and curative programmes, the Romanian health-care system needs to consider its priorities.^{39,40} A strengthened primary care system could be the key to improved access, quality and efficiency of public healthcare services—e.g., by improving stop smoking rates. Continuity of support, training and confidence building, as well as a better allocation of resources, is needed; otherwise future programmes will face the same fate as the previous Stop Smoking programme, now ended by a lack of financial resources.

Conclusions

Many of the barriers described by the Romanian FPs reflected universally recognised challenges to the provision of smoking cessation advice, such as lack of time, limited resources, fear of endangering the doctor-patient relationship and lack of confidence in smoking cessation skills. The context of a middle income economy, pressure on primary care facilities, and relatively hierarchical health-care systems exacerbated many of these problems and created barriers that will need to be addressed if Romania is to achieve the aims of its National Programme Against Tobacco Consumption.

ACKNOWLEDGEMENTS

The authors thank the International Primary Care Respiratory Group (IPCRG) whose E-Faculty programme aims to increase primary care research capability. They supported the study by providing training (from MAM) and by providing a small grant. The authors also thank Samantha Louw, Business Manager at IPCRG for logistic support, and Anne Gillespie for her feedback and advice on the preparation of the English version of the paper. They express their appreciation to the Association of Family Physicians from Bucharest and Ilfov County (AMF-B) for creating the proper organisational environment for the preliminary preparation of this study. Assistance provided by Teodora Buga and Adrian Alexandrescu from the Servier pharmaceutical group in organising the focus group is greatly appreciated. We offer our special thanks to all the family physicians who agreed to participate in our research.

CONTRIBUTIONS

CP (quarantor) initiated the collaborative project, designed data collection tools, collected and analysed data and drafted and revised the Romanian version of the paper. MAM designed data collection tools, analysed data and drafted and revised the English version of the paper. SW and HP analysed data and drafted and revised the English version of the paper. MB designed data collection tools and collected data. CSO, SA and IT analysed data and revised the paper.

COMPETING INTERESTS

The authors declare no conflict of interest.

FUNDING

The International Primary Care Respiratory Group contributed to research costs.

REFERENCES

- 1 World Health Organization, Ministry of Health Romania. Global Adult Tobacco Survey, Romania 2011. Available at http://www.who.int/tobacco/surveillance/sur vey/gats/romania/en/index.html, accessed 6 February 2014.
- 2 World Health Organization, Trade, foreign policy, diplomacy and health, Tobacco. Available at http://www.who.int/trade/glossary/story089/en/index.html, accessed 6 February 2014.
- 3 US Department of Health and Human Services Secretary's Advisory Committee on Health Promotion and Disease Prevention Objectives for 2020. Healthy People 2020: An opportunity to address societal determinants of health in the U.S. Available at http://www.healthypeople.gov/2020/about/advisory/SocietalDetermi nantsHealth.pdf, accessed 6 February 2014.
- 4 Fiore MC. Treating tobacco use and dependence: module 1; http://www.meds cape.org/viewarticle/570602, accessed 6 February 2014.
- 5 Stead LF, Bergson G, Lancaster T. Physician advice for smoking cessation. Cochrane Database Syst Rev 2008;(2): CD000165.
- 6 Jamal A, Dube SR, Malarcher AM, Shaw L, Engstrom MC. Tobacco use screening and counselling during physician office visits among adults-National Ambulatory Medical Care Survey and National Health Interview Survey, United States, 2005-2009. MMWR Morb Mortal Wkly Rep 2012; 61, Suppl 38-45.
- 7 National Centre for Quitting Smoking [Online]. Available at www.stopfumat.eu,
- 8 Mihaltan FD, Ciobanu M (eds). Tobacco consumption: consequences and treatment. Medicala Publishing House: Bucharest, Romania, 2001.
- 9 Panaitescu C, Oana SC, Manea V, Chiriti M, Anghelescu P, Angelescu D. Smokers who want to guit prefer their GP advice and support: a six months evaluation study in a primary care practice group. Paper presented at International Primary Care Respiratory Group World Conference; Seville; 2008 May 28-31.
- 10 Kitzinger J. Qualitative research. Introducing focus groups. BMJ 1995; 311: 299-302.
- 11 Britten N. Qualitative interviews in medical research, BMJ 1995; **311**: 251–253.
- 12 Marshal MN. Sampling for qualitative research. Family Practice 1996; 13: 522–525.
- 13 Murphy E, Dingwall R, Greatbatch D, Parker S, Watson P. Qualitative research methods in health technology assessment: a review of the literature. Health Technol Assess 1998: 2: iii-ix, 1-274.
- 14 Miles M, Huberman A. Qualitative data analysis. London: Sage, 1984.
- 15 Pope C, Ziebland S, Mays N. Qualitative research in health care: analysing qualitative data. BMJ 2000; 320: 114-116.

- **n**pj
 - 16 Romanian Society of Family Medicine. Financing of the health care system and family medicine in Romania 1990–2010, available at http://www.snmf.ro/sites/ default/files/Financing_of_Healthcare_and_Family_Medicine_1990-2010.pdf, accessed 6 February 2014.
 - 17 Novick G. Is there a bias against telephone interviews in qualitative research? Res Nurs Health 2008; 31: 391–398.
 - 18 Thorndike AN, Rigotti NA, Stafford RS, Singer DE. National patterns in the treatment of smokers by physicians. JAMA 1998; 279: 604–608.
 - 19 Cabana MD, Rand CS, Powe NR, Wu AW, Wilson MH, Abboud PAC et al. Why don't physicians follow clinical practice guidelines? A framework for improvement. JAMA 1999; 282: 1458–1465.
 - 20 Tunis SR, Hayward RS, Wilson MC. Internists' attitude about clinical practice quidelines. Ann Intern Med 1994; 120: 956–63.
 - 21 Zapka JG, Fletcher K, Pbert L, Druker SK, Ockene JK, Chen L. The perceptions and practices of pediatricians: tobacco intervention. *Pediatrics* 1999; 103: e65.
 - 22 Prochazka A, Koziol-McLain J, Tomlinson D, Lowenstein SR. Smoking cessation counseling by emergency physicians: opinions, knowledge, and training needs. *Acad Emerg Med* 1995; 2: 211–216.
 - 23 Simoyan OM, Badner VM, Freeman KD. Tobacco cessation services in dental offices. Are we doing all we can? N Y State Dent J 2002; **68**: 34–40.
 - 24 Secker-Walker RH, Solomon LJ, Flynn BS, Dana GS. Comparisons of the smoking cessation counselling activities of six types of health professionals. *Prev Med* 1994; 23: 800–808.
 - 25 Mowat DL, Mecredy D, Lee F, Hajela R, Wilson R. Family physicians and smoking cessation. Survey of practices, opinions, and barriers. Can Fam Physician 1996; 42: 1946–1951.
 - 26 Rosser WW. The role of the family physician in smoking cessation. *Can Fam Physician* 1984; **30**: 160–167.
 - 27 McIlvain HE, Backer EL, Crabtree BF, Lacy N. Physician attitudes and the use of office-based activities for tobacco control. Fam Med 2002; 34: 114–119.
 - 28 International Primary Care Respiratory Group. Top tips for helping your patients tackle COPD. Available at https://www.theipcrg.org/display/RESCOPD/Top+tips +for+helping+your+patients+tackle+COPD, accessed 14 February 2014.
 - 29 Helgason AR, Lund KE. General practitioners' perceived barriers to smoking cessation-results from four Nordic countries. Scand J Public Health 2002; 30: 141–147.
 - 30 Blumenthal DS. Barriers to the provision of smoking cessation services reported by clinicians in underserved communities. J Am Board Fam Med 2007; 20: 272–279.

- 31 Yarnall KS, Pollak KI, Ostbye T, Krause KM, Michener JL. Primary care: is there enough time for prevention? *Am J Public Health* 2003; **93**: 635–641.
- 32 Maciosek MV, Coffield AB, Edwards MN, Flottemesch TJ, Goodman MJ, Solberg LI. Priorities among effective clinical preventive services: results of a systematic review and analysis. Am J Prev Med 2006: 31: 52–61.
- 33 Fullard E, Fowler G, Gray M. Promoting prevention in primary care: controlled trial of low technology, low cost approach. Br Med J Clin Res Ed 1987; 294: 1080–1082.
- 34 Kaper J, Wagena EJ, Willemsen MC, van Schayck CP. Reimbursement for smoking cessation treatment may double the abstinence rate: results of a randomized trial. Addiction 2005: 100: 1012–1020.
- 35 Willemsen MC, Segaar D, van Schyack CP. Population impact of reimbursement for smoking cessation: a natural experiment in the Netherlands. *Addiction* 2013; 108: 602–604.
- 36 Van Schayck OCP, Pinnock H, Østrem A, Litt J, Tomlins R, Williams S et al. IPCRG consensus statement: tackling the smoking epidemic—practical guidance for primary care. Prim Care Respir J 2008; 17: 185–193.
- 37 Goldstein A, Scott G, Mirkin R. Tobacco dependance programme: a multifaceted systems approach to reducing tobacco use among Kaiser Permanente members in northern California. *Perm J* 2005; 9: 9–18.
- 38 World Bank Group -Romania Partnership Program Snapshot, Available at http://www.worldbank.org/content/dam/Worldbank/document/eca/Romania-Snapshot.pdf, accessed 12 February 2014.
- 39 Vlădescu C, Scîntee G, Olsavszky V, Allin S, Mladovsky P. Romania: Health system review. Health Systems in Transition 2008; 10: 1–172.
- 40 Evaluation of structure and provision of primary care in Romania, WHO, 2012; available at http://www.euro.who.int/__data/assets/pdf_file/0005/167576/Evalua tion-of-structure-and-provision-of-primary-care-in-Romania.pdf, accessed 1 March 2014.

This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. The images

or other third party material in this article are included in the article's Creative Commons license, unless indicated otherwise in the credit line; if the material is not included under the Creative Commons license, users will need to obtain permission from the license holder to reproduce the material. To view a copy of this license, visit http://creativecommons.org/licenses/by-nc-nd/4.0/

Supplemental Information accompanies the paper on the npj Primary Care Respiratory Medicine website (http://www.nature.com/npjpcrm)