



## Original Research

# A qualitative study of English community pharmacists' experiences of providing lifestyle advice to patients with cardiovascular disease<sup>☆</sup>

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## Abstract

**Background:** Cardiovascular disease (CVD) progression is modifiable through lifestyle behaviors. Community pharmacists are ideally placed to facilitate self-management of cardiovascular health however research shows varied pharmacist engagement in providing lifestyle advice.

**Objective:** This study explored community pharmacists' experiences and perceptions of providing lifestyle advice to patients with CVD.

**Methods:** Semi-structured interviews were conducted with fifteen pharmacists (1 supermarket; 7 multiple; 7 independent) recruited through multiple methods from community pharmacies across the Midlands, England. A thematic analysis was conducted using a Framework approach.

**Results:** Pharmacists categorized patients according to their perceptions of the patients' ability to benefit from advice. Many barriers to providing lifestyle advice were identified. Confidence to provide lifestyle advice varied, with pharmacists most comfortable providing lifestyle advice in conjunction with conversations about medicines. Some pharmacists felt lifestyle advice was an integral part of their role whilst others questioned whether pharmacists should give lifestyle advice at all, particularly when receiving no remuneration for doing so.

**Conclusion:** Pharmacists viewed providing lifestyle advice as important but identified many barriers to doing so. Lifestyle advice provision was influenced by pharmacists' perceptions of patients. Professional identity and associated role conflict appeared to underpin many of the barriers to pharmacists providing lifestyle advice. Pharmacists may benefit from enhanced training to: increase their confidence to provide lifestyle advice; integrate lifestyle advice with regular pharmaceutical practice and challenge their perceptions of some patients' receptiveness to lifestyle advice and behavior change. Changes to the way UK pharmacists are remunerated may increase the provision of lifestyle advice.

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**Keywords:** Cardiovascular disease; Community pharmacists; Lifestyle advice; Professional identity; Self-management

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## Introduction

Health behaviors such as diet, physical activity, tobacco use and alcohol consumption are responsible for approximately 80% of coronary heart disease and cerebrovascular disease, two of the major forms of cardiovascular disease (CVD).<sup>1</sup> The risk of individuals with CVD developing further cardiovascular problems can be reduced through health behaviors such as: smoking cessation; regular physical activity; reducing alcohol and dietary salt consumption and taking medication to treat high blood pressure (hypertension) and high cholesterol (hyperlipidemia).<sup>1</sup> Such behaviors are largely under the control of individuals and therefore can be regarded as part of self-management of CVD. Recent UK government policy suggests that health professionals, including pharmacists, should view every interaction with patients as an opportunity to promote healthy lifestyle choices.<sup>2</sup> The introduction of a new contractual framework and the “best practice” guidelines “Choosing health through pharmacy” which outline how pharmacists can provide public health services gave UK pharmacists a more defined role in public health.<sup>3</sup> This includes supporting patients with chronic conditions such as hypertension and hyperlipidemia through providing lifestyle advice as an essential service in UK pharmacies. These patients can be identified when they collect prescription items dispensed at the community pharmacy, creating an opportunity for pharmacists to facilitate patient self-management of CVD through offering lifestyle advice.

However, previous research has identified varying attitudes and levels of pharmacist engagement in public health related activities.<sup>4–8</sup> Two comprehensive systematic reviews<sup>4,9</sup> found that pharmacists were generally positive about their role in public health, however in practice the role was viewed as secondary to dispensing activities. Pharmacists’ confidence in their ability to perform public health related roles was moderate to low. Many barriers to pharmacists achieving more involvement in public health services have been identified and include workload, time pressure, lack of remuneration and lack of training.<sup>4,9,10</sup> Additionally, pharmacy ownership has been found to influence pharmacists’ public health activity. Bush, Langley and Wilson (2009) found that pharmacists employed by pharmacy multiples reported conflict with commercial interest as a significant barrier to them achieving the set public health agenda.<sup>11</sup>

To date, the only known publication assessing pharmacists’ attitudes specifically toward CVD prevention and promotion was conducted in Canada.<sup>10</sup> Despite most pharmacists indicating an interest in developing a role in CVD prevention, few reported frequently advising about behavior change to reduce CVD risk. To our knowledge, no study has explored the community pharmacist’s experience of providing lifestyle advice for patients with CVD in a UK setting. Unlike systems in place within other countries, in the UK community pharmacists are employed by community pharmacies (private businesses) which act as contractors to the publicly funded National Health Service (NHS), with 80% of pharmacy profits derived from the NHS prescription business.<sup>12</sup> This sets the UK apart from other countries and therefore the impact on pharmacists’ advice-giving behavior needs to be explored. A qualitative approach was used to gain a deeper understanding of pharmacists’ experiences, particularly given the number of potential barriers to engagement in public health activities identified in previous research.

## Aim

The study aimed to explore English community pharmacists’ experiences of providing lifestyle advice for patients with CVD.

## Methods

### *Study design and setting*

Semi-structured interviews were conducted with community pharmacists at their workplace or by telephone. Ethical approval for the study was obtained from Aston University Research Ethics Committee.

### *Participants*

Fifteen community pharmacists participated in the study. These were six men and nine women, mean age 30.8 years (range: 23–55 years). Pharmacy ownership was categorized according to the classification used by Bush et al (2009)<sup>11</sup>: supermarket; multiple (200 outlets or more); large chain (more than 20 outlets but fewer than 200); small chain (20 outlets or fewer but more than 5); independent (5 outlets or fewer). One participant was employed by a supermarket community pharmacy, seven by multiple community pharmacies, two by small chain pharmacies and five participants by

independent pharmacies. Participants had varying levels of experience practicing as community pharmacists; the mean time participants had practiced was 7.2 years (range: 6 weeks to 34 years). Participants' experience in consulting specifically patients with CVD was not measured as all UK community pharmacists are required to provide care for patients with chronic conditions such as CVD.

Participants were identified through advertising the study at a meeting for local pharmacists and writing to 150 community pharmacies randomly selected from a list of all community pharmacies in the East and West Midlands, England, and following up with a telephone call. Additionally, word-of-mouth and snowballing techniques were employed, with pharmacists who had found out about the study at the meeting for pharmacists informing colleagues and other contacts. Eight participants were recruited through word-of-mouth and snowballing techniques whilst seven participants were recruited through writing to randomly selected community pharmacies. The only exclusion criterion was participants who were not practicing community pharmacists in England. Where possible, the authors sampled pharmacists from supermarket, multiple and independent community pharmacies to obtain a breadth of perceptions and experiences. One pharmacist contacted the researcher to express interest in participating in the study but did not respond to further contact from the researcher. No participants withdrew from the study. The study did not have a target sample size; rather it aimed to recruit participants until saturation of key themes occurred. During data collection, before considering further participant recruitment, preliminary data analysis was conducted which suggested that data saturation had occurred.

#### *Data collection*

The data were collected by the first author, KM. The interviews – eight in person at the participants' workplace and seven by telephone – were conducted at a time convenient to the participant and lasted on average 30 min (range: 20–50 min). Open-ended questions allowed the participant to shape the direction the interview took, with the interviewer adopting a facilitative role, using an interview schedule to identify areas of interest and provide cues (see appendix). The schedule covered the following topics: facilitators and barriers to giving lifestyle advice; experience of delivering lifestyle advice; relationships with

patients and other health professionals; the role of the community pharmacist and the suitability of the community pharmacy environment for receiving advice. The interview began in an open-ended manner, asking participants to 'tell me about your typical working day as a community pharmacist,' then slowly moving to more sensitive topic areas such as 'describe your working relationship with other professionals involved in cardiovascular health care' once a rapport between the participant and interviewer had been established. The interviews were audio recorded and transcribed verbatim. The interviews were conducted until no new themes emerged.

#### *Analysis*

The interview transcripts were analyzed thematically, focusing primarily on the participants' experience.<sup>13</sup> The analysis was interpretative, recognizing the interaction between the researcher and the data. A framework approach was used to structure the analysis.<sup>14</sup> Framework Analysis is a five stage process of: familiarization, forming a thematic framework, indexing, charting and mapping and interpretation. Familiarization with the data was achieved through a process of reading and re-reading a small number of interview transcripts, noting the participants' use of language, repetition of words or thoughts patterns emerging from the data and any contradictions within the participants' accounts. This enabled the identification of emergent themes, constituted by: a collection of references indicating a pattern in how participants experienced the act of giving patients advice or how they perceived patients' behavior, the participants' use of language to describe their experience of giving lifestyle advice and any conflicting ideas identified within or between the participants' accounts. A thematic framework was constructed using the emergent themes identified as described above from the interview, and prevalent themes identified through an a-priori literature review. Commonalities between emergent themes from the data and themes identified through the a-priori literature review and interview schedule were identified, with all themes given an equal weighting within the thematic framework. Each emergent theme and its associated sub-themes were assigned a number thus creating a numerical index to apply the thematic framework to the data. The researcher (KM) repeated the initial process of familiarization and annotation with the remaining interview

transcripts, adding any additional emergent themes to the thematic framework and applying the new items on the framework to previously analyzed transcripts. This enabled the construction of charts which summarized the participants' extracts and where they were situated within the data alongside the emergent themes. Data analysis was conducted by KM, a doctoral researcher and trainee Health Psychologist with experience in conducting qualitative research in health care settings. KM continually verified the findings with the co-authors to ensure the validity of interpretations. The co-authors, two experienced health psychologists and a professor of pharmacy law and practice, have considerable experience in conducting qualitative research in pharmacy practice and other health care settings.

## Results

The thematic analysis produced three main themes with associated sub-themes (see [Table 1](#)). In the reported analyses, participant pseudonyms were created to provide information about: pharmacy ownership [Supermarket ('Super') or multiple ('Multi') or independent ('Indep') which incorporated both independent and small chain pharmacy ownership]; community pharmacist participant number (e.g. CP 1) and number of years the participant had been a practicing pharmacist (e.g. 8 yrs). In the quotations below, where respondents emphasized particular words these words are italicized.

### *Barriers to providing lifestyle advice*

#### *Time and workload*

The most frequently cited barriers were time and workload, which were evident throughout the

accounts of all the participants. These barriers seemed to be particularly salient for pharmacists employed by multiple pharmacies. Many pharmacists described balancing multiple roles in a time-limited environment which placed them under pressure to meet targets and provide a quick service. This appeared to leave some pharmacists resigned to not being able to offer patients advice:

"... people are waiting so obviously you can't really talk to people... unless it's a quiet period which is rarely that we're quiet ..." MultiCP4-(6 weeks).

Some pharmacists, notably more often those employed by independent pharmacies, appeared more confident to base the provision of advice on clinical need rather than the time available:

"... the patients that we find need our time, they get our time and whether that means other people have to wait, they have to wait..." IndepCP3(2yr).

It appeared that the independent pharmacist did not fear the repercussions of keeping patients waiting which contrasts with the experiences of many of the pharmacists employed by multiple community pharmacies.

### *Patient perceptions of pharmacists*

Many of the pharmacists felt that the role of the community pharmacist was not clearly defined which meant patients did not have a good understanding of the pharmacists' professional capacities. The pharmacists reported that the lack of a defined role made it difficult for them to provide lifestyle advice, as patients did not consider this part of the pharmacists' role:

"... I still think the pharmacist's role isn't as defined as it should be ... people still ... they will always go to the doctor first, erm I don't think

Table 1  
Emergent themes and sub-themes

Theme	Sub-theme
Barriers to providing lifestyle advice	Time and workload Patient perceptions of pharmacists
Professional identity	Confidence in providing lifestyle advice Health professional–patient relationship Lifestyle advice in medicines use reviews Future direction of the profession Lack of remuneration in professional role Pharmacy as a business and associated role conflict
Pharmacists' perceptions of patients	Categorizing patients Beliefs about patients with CVD

they realize what the pharmacist in the pharmacy can do ...” MultiCP1(1yr).

“I think a lot of patients just think the pharmacist gives out my tablets ...” IndepCP5(1yr).

The retail environment in which the pharmacists practice appeared to contribute to this perception:

“... a lot of patients don't see pharmacists as a health care professional; they see them as glorified shop owners ...” MultiCP4(0.1yr).

It was also perceived that patients expected a quick service from pharmacists; it may be that the retail environment was responsible for this, leading to expectations of the kind of service associated with sales staff rather than health professionals. This expectation of brief transactions appeared to make providing lifestyle advice difficult:

“... I think that is the main issue with pharmacy is that pharmacy is all about erm in and out, in and out, in and out, they, they don't really see ... very few patients see community pharmacists as a resource to be used like, like a GP ...” MultiCP6(1yr).

#### *Confidence in providing lifestyle advice*

The pharmacists' confidence to provide lifestyle advice appeared to develop over time, however even experienced pharmacists could be reluctant to offer lifestyle advice uninvited:

“... much as we're supposed to do it ... I will not just speak to someone who is clearly overweight and start a conversation about weight ...” IndepCP6(26yr).

Lifestyle advice concerns sensitive issues such as body weight, alcohol consumption and dietary intake, and because of this, some of the pharmacists appeared to lack the confidence to address these with patients through providing lifestyle advice. Many pharmacists found it particularly difficult to initiate conversations about body weight:

“... obviously it's a touchy subject, you know, if you've got a genuinely er larger person in front of you ... you don't want to insult them, you don't want to ... to make them feel uncomfortable so it's a catch 22 a little bit ...” IndepCP5(1yr).

These pharmacists appeared to construct obesity as a taboo, making them reluctant to raise the topic with patients. However this reluctance was not limited to opportunistic advice which according to UK government policy<sup>2</sup> should be

offered to patients regardless of their reason for visiting the pharmacy. One pharmacist was so concerned about eliciting a negative patient response that she avoided informing a patient that they were overweight even after weighing them. The reluctance to initiate conversations about lifestyle behaviors with patients appears to stem from pharmacists expecting a negative reaction from patients in response to their advice:

“... people can get aggressive but not many people do but you just don't wanna offend someone, that the biggest thing ... you still want to make them happy but give them advice.” MultiCP4(0.1yr).

The perception that patients may react negatively to lifestyle advice may make pharmacists reluctant to have conversations with patients about their lifestyle and the impact health behaviors can have on the management of CVD.

Some of the pharmacists felt that they did not receive appropriate skills training to prepare them to offer patients lifestyle advice:

“... there is a lack of training as to how we will approach patients which I say is one of the challenges and how we would approach patients on you know, giving smoking [cessation advice] erm sort of the social skills side as well, having a general conversation with people and how we would convince them [to change their behavior] ...”. MultiCP1(1yr).

Another pharmacist noted:

“... a lot of university now is focused around health care, public health ... but the way to put it across to people, there's not much, you've got to develop your own way ...” MultiCP4(0.1yr).

This statement is particularly noteworthy, given that the pharmacist who does not feel he received appropriate training to convey public health messages (which often incorporate lifestyle advice) is a recent graduate and therefore has received his training after the introduction of the revised pharmacy contract which outlined the role of pharmacists in providing public health services. A perceived lack of training may also contribute to pharmacists' reluctance to offer lifestyle advice if pharmacists do not feel they have the skills to offer such advice to patients.

#### *Professional identity*

##### *Health professional–patient relationship*

The pharmacists expressed positive opinions about the role community pharmacy has, or could

have, in promoting health behaviors to varying extents. In line with the ‘health professional’ identity and role of the community pharmacist, many of the pharmacists actively endorsed a patient-centered, collaborative approach to pharmaceutical practice. However the perceived importance of forming relationships with patients appeared to differ according the status of pharmacists’ employers:

“... the main difference [between the Independent workplaces and other pharmacies] is having a little talk with them about their medication ... offer extra advice to them so they feel like somebody actually cares ...” (IndepCP7-2yr).

Pharmacists employed by independent and notably the supermarket-owned pharmacies seemed to place more emphasis on the importance of building a relationship with patients than multiple-ownership pharmacists.

#### *Lifestyle advice in Medicines Use Reviews*

The pharmacists conceptualized providing lifestyle advice as an activity primarily performed as part of additional services offered in some English community pharmacies such as the Medicines Use Review (MUR) and New Medicines Service (NMS) which should incorporate advice on diet, exercise and smoking status, stating that this was a common occurrence:

“... with the MURs because there is a section on that now which is about lifestyle advice, you can finish talking about the medicine and go “ok and what about your day to day life? ... are you getting some exercise?” IndepCP2(2yrs).

There appeared to be a clear distinction between providing lifestyle advice as part of MURs/NMS, and “core” aspects of community pharmacy practice such as checking and dispensing medication which did not appear to frequently incorporate lifestyle advice. Outside of MURs, providing lifestyle advice appeared not to be a priority for some pharmacists:

“... pharmacists have a number of other stuff to do ... sometimes, I feel, [lifestyle advice] it becomes an afterthought ... .because ... you feel ... you’ve gotta get all the other stuff [to do] ... .” SuperCP1(8yrs).

#### *Future direction of the profession*

The pharmacists had differing, sometimes conflicting, opinions on the future of community pharmacy. Some pharmacists described their wish to move away from traditional roles and

build upon the ‘health professional’ identity that involves giving lifestyle advice:

“... it’s pushing pharmacy toward a clinical role rather than the old dispensing.” IndepCP5(1yr).

This respondent was very keen for pharmacists to have more involvement in patient care and to move away from the traditional dispensing process. However his use of the word ‘pushing,’ which denotes a lack of consent or readiness, suggests that he believes that not all pharmacists share his vision, and some pharmacists may be resistant to their role changing. Another pharmacist questioned whether lifestyle advice should be part of the community pharmacists’ role at all:

“... we are looking at a nightmare scenario in the future and it would be good if somebody could stop it [aging population and obesity], but whether that is the role of the pharmacist or not I don’t know.” IndepCP1(23yrs).

Whilst acknowledging the role of lifestyle behaviors and alluding to the detrimental effect of obesity, this pharmacist appears to distance herself from the responsibility of offering patients lifestyle advice through questioning whether it should be pharmacists’ professional responsibility to offer this advice.

#### *Lack of remuneration in professional role*

Some pharmacists referenced the importance of the dispensing process due to it providing the main source of the community pharmacy’s income. A number of the pharmacists suggested that current remuneration practices were not conducive to delivering lifestyle advice and health promotion:

“... if you are stopping a heart attack then they’re not going to be taking any medicines and that’s ultimately putting yourself out of business so it’s not in your interests to keep people healthy as a pharmacist at the moment ... what other profession does something to stop their future payments?” IndepCP1(23yrs).

This reference to UK pharmacists’ payment structure, that remunerates pharmacists directly per prescription item dispensed but provides no remuneration for lifestyle advice may reinforce beliefs that providing lifestyle advice is not an important or valued part of the pharmacists’ professional role. Some pharmacists indicated that current remuneration practices resulted in there being less incentive to provide lifestyle advice than other activities in the pharmacy which are remunerated,

“... you’re providing the [lifestyle] advice ... erm and you’re getting no monetary reward for it ... so most pharmacists will think oh I can’t be bothered to be giving that advice, when there’s no value to it for me”. MultiCP6(1yr)

The pharmacist describes an inherent conflict between their role as a health professional with a responsibility to promote health through giving patients lifestyle advice, and their business employee role which focuses on financial return, which giving lifestyle advice does not currently provide.

#### *Pharmacy as a business and associated role conflict*

Most pharmacists explicitly made reference to the community pharmacy being a business environment in addition to a provider of health care. A pharmacy manager described the experience he would like people to have when they visit the community pharmacy:

“... we are trying to always differentiate on customer care ... the need and the expectation is that that person will sort of somehow when they next need some advice think “ooh, that nice person in that shop, I’ll go and see them again.”” MultiCP7(34yr).

Targeting the patient–pharmacist interaction as an opportunity to increase custom raises the question as to whether developing a patient–clinician relationship and enhancing profits are interlinked. One pharmacist described her hesitation to offer potentially unwelcome health advice for fear it may affect custom to the pharmacy:

“I mean it’s a business environment ... erm so if you lose loads of customers your boss is on your back ... if you insult somebody by telling them they look fat then you’re going to lose that customer [laughs]” IndepCP2(2yrs).

Her belief that this would reflect on her employment status could lead to her not offering lifestyle advice, which conflicts with her health professional role. Other pharmacists expressed concern at company targets to perform a specified number of MUR consultations conflicting with the clinical need of patients:

“... because I know colleagues... who are quite ... they push it quite hard ... but the problem is that I think the patient doesn’t get anything out of it because it’s just ... I feel the patient’s being ... cajoled into a room because you want to do something ...” SuperCP1(8yrs).

The company targets appear to be structuring the pharmacists’ behavior and therefore potentially

influencing clinical decisions, presenting a challenge to the pharmacists’ professional autonomy.

#### *Pharmacists’ perceptions of patients*

##### *Categorizing patients*

The pharmacists had models of different ‘types’ of patients which they used to categorize the patients they encountered. One pharmacist described how staff identified patients whom they perceived would respond well to receiving lifestyle advice:

“... so they know which ones who you can talk to and which ones ... won’t talk to you, which ones will follow through, which ones can provide advice for ...” SuperCP1(8yrs).

Within the context of a busy, pressured workplace environment and a legal responsibility to ensure that patients are dispensed the correct medication, it makes sense that pharmacists would develop cognitive ‘shortcuts,’ also known as stereotypes, to interpret patients’ behavior and be able to respond accordingly.<sup>15</sup> The stereotypes created by pharmacists are important, as they are likely to influence the interactions the pharmacist has with patients and may influence the care patients receive. It follows that patients categorized as “ones” who “won’t talk” are less likely to be given lifestyle advice than patients the pharmacist perceived to be more open to receiving lifestyle advice.

##### *Beliefs about patients with CVD*

Some pharmacists believed that patients with CVD lacked knowledge about their condition and appropriate self-management. Yet many pharmacists simultaneously believed that the majority or all patients (with CVD or otherwise) were aware of the direct association between health behaviors and poor health, citing this as a reason for not providing patients with uninvited lifestyle advice.

“... in all honesty there’s nobody on this planet that doesn’t *know* that they need to lose weight or doesn’t know that they need to cut their drinking a bit and so on, they *know* that, I don’t believe there’s anybody that doesn’t know that maybe they could be healthier” IndepCP6(26yr).

Whilst patients may be aware that they need to change their behavior, pharmacists offering such patients behavior change advice may act as means of facilitating this change. It is also of note that many of the pharmacists did not appear to differentiate between giving lifestyle advice to patients with CVD, for whom lifestyle behaviors can be as

important as medication for self-management, and lifestyle advice to the general patient population.

## Discussion

The pharmacists who participated in this study viewed providing lifestyle advice as important but identified many barriers to doing so. A novel finding from the study concerns the pharmacists' perceptions of patients. First, pharmacists appeared to categorize patients in terms of 'types' of patients who were open to receiving lifestyle advice and those who were not. Importantly, these stereotypes may influence whether some patients are given lifestyle advice by pharmacists. The pharmacists also appeared to believe that patients with CVD lacked awareness and knowledge of CVD, however simultaneously believed these patients were aware of the role health behaviors have in CVD development and management. Perhaps, as a reflection of this belief, many of the pharmacists did not distinguish between giving lifestyle advice patients with CVD, for which lifestyle behaviors are the primary cause and essential in patient self-management to prevent disease progression,<sup>1</sup> and the general patient population. The perception that patients with CVD are aware of the role health behaviors play in CVD development and management may lead pharmacists to believe that lifestyle advice will not benefit these patients, to and consequently such advice may not be a high priority activity in a busy pharmacy. Street, Gordon and Haidet (2007)<sup>16</sup> found physician communication behaviors to correlate with the physicians' perceptions of patients, with physicians being more patient-centered, less contentious and showing more positive emotions toward patients who they perceived to be better communicators, more actively involved in the consultation, more likely to adhere to treatment and more satisfied with treatment. It may be that patients who are not 'actively involved' in consultations, or perceived to be of a 'type' not open to receiving advice may in fact need more assistance than patients who are able to actively engage in encounters with health professionals.

Furthermore, pharmacists in the present study also believed that giving patients lifestyle advice may provoke a negative response, with some participants alluding to the potential of patients to become aggressive. This supports the findings of previous reviews which found that pharmacists

feared 'interfering' with or offending patients.<sup>4,9</sup> A recent qualitative study exploring pharmacists' attitudes toward providing advice about alcohol consumption also found that having concerns about offending or alienating customers was a major barrier to offering the service.<sup>17</sup> Research conducted with Australian clinicians found the clinicians' perceptions of how acceptable clients felt it was for them to offer lifestyle advice affected providing such advice, with 'low implementers' expressing concerns of appearing judgmental, receiving negative reactions from clients and damaging the clinician–client relationship.<sup>18</sup> It is also noteworthy that the pharmacists' perceptions contrast with those in the literature exploring patients' perceptions of pharmacists, which suggests that whilst most patients do not expect to receive lifestyle advice from a pharmacist, they are open to receiving it.<sup>4</sup> A recent survey of the Scottish public's views of pharmacist involvement in minimizing alcohol related risk found that two thirds of participants had confidence and trust in pharmacists discussing safer drinking, although three quarters indicated they would prefer to consult their doctor.<sup>19</sup>

Professional identity emerged as a prominent theme in relation to the provision of lifestyle advice, appearing to underpin many of the perceived barriers to providing lifestyle advice. At the core of this appeared to be the retail environment in which community pharmacists practice, resulting in a dual role of health professional and business employee. This supports previous qualitative research which found that the community pharmacy's location in a retail environment was a constraint to patient-centered professionalism, seen to potentially compromise patient care and 'demean' the public's view of the pharmacists' role.<sup>20</sup> In keeping with previous research,<sup>4,9</sup> most of the pharmacists were positive about a role in public health (in this case providing lifestyle advice) but reported difficulties achieving this due to barriers such as time, high workload and pressure to meet targets. Remuneration appeared key to pharmacists' provision of lifestyle advice for patients with CVD, with the pharmacists suggesting that current remuneration practices hindered their provision of lifestyle advice. The payment structure associated with UK pharmacists' contractual agreement results in pharmacists being paid a professional fee plus reimbursement from the National Health Service for every prescription item they dispense. Despite being a contractual obligation and 'essential service,'



currently UK pharmacists receive no direct financial remuneration for providing routine lifestyle advice. Some pharmacies are commissioned by the NHS to provide 'enhanced services' such as Medicines Use Reviews, described by many of the pharmacists in the current study as a means to provide lifestyle advice. However pharmacists are only reimbursed for providing MURs up to a set number per year number of MURs per year,<sup>21</sup> therefore they would receive no remuneration for an MUR consultation with a patient after the pharmacy has reached the MUR 'limit, irrespective of patient need. This remuneration system appears to play a role in structuring pharmacists' behavior, and may reinforce a belief that providing lifestyle advice is less important than other activities in the pharmacy, with some pharmacists suggesting that providing lifestyle advice was not in their best interests because they received no financial return for doing so. As a result, many pharmacists reported prioritizing other activities (primarily dispensing) over providing lifestyle advice, again supporting the findings of previous studies.<sup>4,9,10</sup>

Prioritizing dispensing activities may also be a means of maintaining the traditional professional identity pharmacists used to hold, with some pharmacists in the current study questioning whether pharmacists should have a role in providing lifestyle advice at all. Previous qualitative research exploring Welsh pharmacists' views on patient-centered professionalism found that the pharmacists viewed dispensing as the defining aspect of their professionalism.<sup>20</sup> Furthermore, Elvey, Hassell and Hall<sup>22</sup> found that pharmacists perceived 'the scientist' component of their training and role as the most important of eleven professional identities identified by the participants. This may underpin some of the pharmacists' hesitance to move away from the dispensing process adopt more 'clinical' roles such as providing lifestyle advice.

However, the way barriers to providing lifestyle advice were perceived by pharmacists employed by multiple and independent pharmacies appeared to differ. Pharmacists employed by independent pharmacies appeared to be more comfortable spending time offering patients lifestyle advice, even if other patients were waiting to be seen. High workload and time pressure seemed to be perceived more saliently by pharmacists employed by multiple pharmacies. This in turn appeared to be underpinned by pressure to meet company targets, causing potential conflict between the pharmacist's health professional and business employee roles. This has implications for

pharmacists providing lifestyle advice, and in the current study appeared to manifest in two ways: pharmacists conducting consultations to meet company targets rather than in response to clinical need and pharmacists not offering potentially unwelcome health behavior advice to patients, fearing that this may have repercussions on their employment status if the patient reacted badly. This supports a previous research study by Bush et al (2009)<sup>11</sup> which found that pharmacists working in multiple pharmacies experienced conflict with commercial interests as a significant barrier to providing the set public health agenda.

The retail environment of the community pharmacy was perceived to affect perceptions of the pharmacists' role, with participants inferring that patients did not recognize the community pharmacist as a health professional. This supports the findings of two recent UK surveys of the general public perceptions of community pharmacy's role in weight management<sup>23</sup> and CVD screening,<sup>24</sup> finding that most respondents lacked awareness of the types of health services community pharmacists can offer. In the present study, lifestyle advice provision was reportedly affected, due to patients not fully recognizing the pharmacists' professional opinion. It may be that the 'shop' appearance of the community pharmacy results in patients having different expectations and perceptions of community pharmacists than they have of other health professionals. This may result in patients perhaps expecting the 'customer service' that they expect in a retail environment, resulting in less tolerance to wait to be seen by a community pharmacist than other health professionals operating in a more traditional clinical environment.

Anderson et al (2003)<sup>9</sup> suggested that pharmacists have a reactive approach to public health provision and are most comfortable giving advice around medicines, which also appeared to be the case in the present study. The pharmacists seemed happy to provide lifestyle advice if the patient asked or if it related to medicine. The pharmacists primarily conceptualized lifestyle advice as part of MURs, pharmacy services which provide some patients with a yearly consultation with a pharmacist to assess the patient's use of medicine, incorporating some questions about their lifestyle. However, importantly, other than in these consultations there appeared to be a dichotomy between dispensing and lifestyle advice, and the pharmacists did not report routinely integrating lifestyle advice with their regular dispensing practices. This appeared to relate to a lack of time, fear of

a negative patient response and a lack of confidence in giving lifestyle advice. According to Bandura (1977),<sup>25</sup> self-efficacy (confidence in one's ability to carry out a behavior), is a key predictor of whether the behavior is performed. Some pharmacists reported a lack of confidence in their abilities to initiate conversations about health behaviors with patients, with some pharmacists reporting that they had not received appropriate training to enable them to provide lifestyle advice. Interestingly, this was not restricted to pharmacists who had qualified before the introduction of the pharmacy contract; newly qualified pharmacists also reported a lack of self-efficacy to give patients lifestyle advice. This supports the findings of previous reviews which concluded that pharmacists – low levels of self-efficacy and required more training to increase their confidence in providing public health services.<sup>4,9,26</sup>

#### *Strengths and limitations*

This was an in-depth qualitative study conducted with community pharmacists in a UK setting. To our knowledge, it is the first study to explore English community pharmacists' experiences of providing lifestyle advice for patients with CVD. There are however limitations to this research. Firstly, to increase study participation, the method of interviewing participants differed, with seven pharmacists interviewed face-to-face and seven by telephone. This could have affected the quality of the data collected from the telephone interviews as the interviewer was not able to pick up on the participants' body language and any non-verbal cues which may have affected the quality of the rapport established between the interviewer and participant. Alternatively, the increased sense of anonymity may have enhanced the quality of the data collected. Furthermore, a non-response bias may have occurred, and pharmacists who were very motivated to provide lifestyle advice may have opted to participate in the study more than pharmacists who were less likely to offer lifestyle advice. It is noteworthy however that the current study sampled pharmacists with a range of experiences, some of whom reported not regularly providing lifestyle advice. There is a paucity of in-depth qualitative research in this field of research. The sample was representative of those working in a variety of community pharmacy settings and this resulted in contrasting as well as complementary accounts. The richness of the data collected and the internal validity of

the analysis gives us confidence that the findings are theoretically transferable,<sup>22</sup> thus provide useful insight and may be useful in a similar context, if not statistically generalizable. Further research is currently being conducted by the authors to triangulate the findings of the current study in a statistically generalizable sample.

#### *Practice implications*

In order to implement government policy, contractual obligations and best practice guidelines, pharmacists may benefit from enhanced training to increase their self-efficacy to provide lifestyle advice to patients with CVD. Pharmacists may also benefit from education in integrating lifestyle advice with regular dispensing practice and capitalizing on interactions with patients in a time-pressured environment. Challenging pharmacists' perceptions of 'types' of patients who may benefit from lifestyle advice and expectations of negative patient responses to such advice may also be beneficial. Changes to the way pharmacists are remunerated for providing lifestyle advice may increase pharmacists' provision of lifestyle advice for patients.

#### **Conclusion**

In conclusion, many pharmacists saw the potential benefits of facilitating patient self-management of CVD through providing lifestyle advice. However, in practice they perceived multiple barriers to doing so and it did not appear to be routine practice. Issues relating to professional identity appeared key barriers to the implementation of lifestyle advice, particularly concerning the way pharmacists are currently remunerated which appeared to result in lifestyle advice being a lower priority than other pharmacy activities. The extent to which pharmacists perceived barriers to providing lifestyle advice to patients with CVD differed, with pharmacists employed by multiple owned pharmacies in particular reporting pressure to provide a quick service and meet targets as preventing them providing lifestyle advice. The retail environment of the community pharmacy was associated with potential role conflict and perceived to result in patients and other health professionals not appreciating the competencies of the community pharmacist. Some of the pharmacists lacked confidence in their ability to give lifestyle advice, particularly concerning weight loss, and did not appear to integrate lifestyle

advice with routine pharmacy practice. The way pharmacists perceived and categorized some patients may result in pharmacists not offering certain patients lifestyle advice.

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## Appendix

### Interview schedule

1. Talk me through your typical working day.
2. What are the five activities which form the most important part of your working day?
3. What role does a community pharmacist currently play in identifying patients at risk of experiencing a cardiovascular event/future cardiovascular events?  
[Prompts: Screening, Identification process (prescription for particular medications), provision of self-monitoring devices, referral to other services, behavior/lifestyle change advice.]
4. What additional services or activities (if any) do you think community pharmacists could provide for cardiovascular patients in the future?  
[Prompts: provision of self-monitoring devices, advice on medication, screening, identification process, behavioral/lifestyle change advice]
5. Talk me through a recent time you have given a cardiovascular patient lifestyle advice.  
[Prompts: Identification process, advice provided, confidence in ability to do so, was it successful, willingness of patient to receive advice].
6. How do you feel about initiating conversations with patients regarding health behaviors such as diet and exercise?  
[Prompts: Confident – if so why, not confident – if not, why not?].
7. Describe any challenges to promoting patient self-management of cardiovascular health in the community pharmacy.  
[Prompts: Time, workload, space, perception of patient's reaction, company policy, lack of confidence in abilities, lack of training].
8. What (if anything) would make it easier to promote patient self-management of cardiovascular health in the community pharmacy?  
[Prompts: Time, workload, space, perception of patient's reaction, company policy, confidence in abilities, appropriate training]
9. In an ideal world what do you think should be part of a community pharmacists' role?
10. What input do you think patients would like from their community pharmacist with

regards to managing their cardiovascular health?

[Prompts: medication advice, behavior/lifestyle advice, advice re: self-monitoring devices, referral to other services].

11. Describe the role different staffing groups within the pharmacy play in the delivery of cardiovascular health promotion.  
[Dispensers' role, health care assistants' role, professional relationship with pharmacist].
12. What are your thoughts on the suitability of the community pharmacy to provide/deliver public health services in general?  
[Geography, opening hours, ease of access, time pressures, privacy, space, pharmacist training]
13. From your perspective, what role has the PCT played in cardiovascular health promotion and prevention of CVD?
14. Describe your working relationship with other professionals involved in cardiovascular health care.  
[Referrals to and from GPs, any areas of conflict, professional identity, impact on service].
15. Is there anything I haven't asked about that you feel is important/relevant?

### Additional information

1. Age
2. Gender
3. Ethnicity
4. Number of years in practice
5. Independent/multiple pharmacy:
  - Independent (5 branches or fewer)
  - Small Chain (more than 5, up to 20 branches)
  - Large Chain (more than 20, up to 200 branches)
  - Multiple (200 branches or above)
  - Supermarket.
6. Post code of pharmacy (used for deprivation score)
7. Services offered by participant's pharmacy:
  - Smoking cessation
  - BP testing
  - Blood glucose testing
  - Cholesterol testing
  - Weight management
  - Medicine use reviews

## New Medicine Service

- Are you happy (a) to be contacted regarding participation in future research studies including piloting questionnaires

and (b) facilitating the recruitment of patients for another study through distributing leaflets and displaying posters in your pharmacy