

Promoting weight management services in community pharmacy: perspectives of the pharmacy team in Scotland

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Abstract *Background* Obesity has reached pandemic levels with more than 1.4 billion adults affected worldwide. While there is a need to systematically develop and evaluate community pharmacy based models of weight management, it is imperative to describe and understand the perspectives of pharmacy staff. In the UK, trained and accredited community pharmacy medicines counter assistants (MCAs) are commonly the front line staff involved in patient consultations and sale of over-the-counter medicines. *Objective* To explore the beliefs and experiences of pharmacists and MCAs in the North-East of Scotland on community pharmacy weight management. *Setting* All 135 community pharmacies in the North-East of Scotland. *Method* A qualitative approach of semi-structured telephone interviews with 31 pharmacists and 20 MCAs in the North-East of Scotland. The semi-structured interview schedule was developed with reference to key domains describing professional practice (i.e. awareness and knowledge, skills, practicalities, motivation, acceptance and beliefs) and contextualised with policy documents and published research on community pharmacy based weight management. Interviews were audio-recorded, transcribed and analysed thematically. *Main outcome measure* Pharmacists' and MCAs' beliefs and experiences with delivering weight management services in community pharmacy. *Results* There were mixed responses from pharmacists and MCAs around pharmacy based weight management services from positive views of providing the

service in community pharmacy to those more reticent who would always favour patients visiting their physician. While all described similar services e.g. measurement of weight, healthy eating advice, supply of products, they acknowledged that support was often opportunistic at the request of customers, with little integration of other providers. Roles described varied from pharmacist only functions to any staff member. While pharmacists generally felt comfortable and confident, MCAs gave more diverse responses. Both Pharmacist and MCAs highlighted the need for a practice model which is systematically developed and suggested a scheme akin to the successful smoking cessation 12-week nicotine replacement therapy service already available in community pharmacies in Scotland. *Conclusion* Pharmacists and MCAs interviewed in this study reported their perceptions of benefits to providing community pharmacy based weight management as part of a wider public health function. They described services as opportunistic and customer driven based on ease of access. There was a notable variation in pharmacist and MCA training, reflected in their levels of comfort and confidence. There is a clear need to systematically develop and provide evidence of effectiveness and cost effectiveness for a pharmacy based practice model with key roles and functions for the full pharmacy team.

Keywords Beliefs · Body weight · Experiences · Medicines counter assistants · Pharmacists · Scotland

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Impact of findings on practice

- Pharmacists and MCAs believe that there is a role for community pharmacy supported weight management services but with key differences in the range of

comfort levels when providing dietary and lifestyle advice, provision of training and perceived lines of responsibility.

- There may be issues related to the belief in and understanding of the evidence for OTC weight loss products in both MCAs and Pharmacists. It is important that these issues are further explored and understood as a preliminary step to developing a practice based model.

Introduction

Obesity has reached pandemic levels with more than 1.4 billion adults affected worldwide [1]. While a recent report from the Organisation for Economic Co-operation and Development (OECD) highlighted a modest slowdown in the progression of the obesity epidemic in a limited number of countries, the prevalence in the majority of countries remains high and on the increase [2]. The prevalence of obesity in Scotland is the highest in the United Kingdom (UK) and fifth globally behind the United States (US), Mexico, Hungary and New Zealand, with estimated societal costs exceeding £1 billion in 2007/8 (UK) [3]. Given that the World Health Organisation has predicted Scottish obesity prevalence figures will exceed 40% of the population by 2030 [4], urgent action has been articulated at Government level to reverse this trend before 2020 [5].

Following the publication of the Convention of Scottish Local Authorities (COSLA) report in 2010 [6], the Scottish Government published the Obesity Route Map Action Plan [7], focusing on the provision of weight reduction schemes through primary care services, with initiatives such as ‘Healthy Eating, Active Living’ [8], and the ‘Keep Well’ programme [9]. The contribution of community pharmacy is highlighted in many strategic documents as a key access point for promoting public health via general health checks and advice to the supply of medication [10]. Notably, the Scottish Obesity Action Resource (SOAR) states that ‘community pharmacy is providing a useful means of engaging with the public on the treatment and prevention of obesity’ [11].

To date, a limited number of studies have focused on the contribution of community pharmacy to weight management. A systematic review published in 2011 of the effectiveness and cost-effectiveness of community pharmacy weight management interventions identified ten studies [12]. The studies included a total of 2583 service users and 582 pharmacies in the US, UK, Switzerland, Spain and Denmark. Generally, studies were poorly designed, often uncontrolled, with mean weight loss at 12 months measured in three studies ranging from 1.1 to 4.1 kg. Subsequent

publications present an equally mixed picture. Most recently a retrospective analysis of 281 patients attending community pharmacy weight management programmes across four primary care trusts in England concluded that reductions in weight and waist circumference can be achieved successfully [13]. However the results of an eight arm randomised controlled trial in England that recruited 740 obese or overweight men and women on a range of commercial or primary care led weight reduction programmes suggests that commercially provided weight management services (Weight Watchers® in particular) are more effective and cheaper than primary care based services led by specially trained staff [14]. This was mirrored by a prospective cohort study by Madigan et al. [15] which recruited 3290 adults to three commercially provided weight management services and one NHS led group programme. Results showed that the commercial programmes lead to a larger short-term (3 months) weight loss compared with the NHS led programme. Long term sustainability could however not be shown. Two studies of the UK general public reported the lack of awareness of services provided by community pharmacies to support weight management, with most respondents opting to seek support from physicians, diet clubs and leisure centres [16, 17]. Furthermore, respondents in one study were concerned over the lack of privacy and potential discomfort in community pharmacies, and a lack of confidence in pharmacy staff training and expertise [17]. A survey of the views and attitudes of community pharmacists in Scotland indicated that the most frequent weight management services offered were supply of medication and advice on diet and exercise [18]. These surveys were limited by convenience sampling, low response rates as well as recruitment and response biases.

There is a need to systematically develop and evaluate community pharmacy based models of weight management. As an initial step, qualitative research to fully describe and understand the perspectives of all pharmacy staff involved in the current provision of weight management services is warranted. In the UK, community pharmacy medicines counter assistants (MCAs) and pharmacists are commonly the front line staff involved in patient consultations and sale of over-the-counter (OTC) medicine. MCAs must complete an accredited medicines counter assistant course, which is normally between 3 and 6 months in length [19].

Aim of the study

The aim of this research was to describe and understand the beliefs and experiences of pharmacists and MCAs of community pharmacy weight management services.

Box 1 Interview core questions

If you provide weight management support and advice, how is this provided, by which members of staff and how is this integrated with other providers such as GPs?

How comfortable are you in giving dietary and lifestyle advice?

How do you think your own life experiences impact?

What do you think about the environment and resources in your pharmacy for providing support?

Are there any targets in your pharmacy for providing support in weight management?

Do you ever monitor or audit the support you give?

How comfortable are your patients in asking for support?

Have you ever received any feedback on your support, from either patients or others?

Can you describe any training you have received or think you need?

Please describe anything else you feel is relevant

Ethical approval

The North of Scotland Research Ethics Committee advised that this study did not require formal review by an NHS Ethics Committee. This study was approved by the Ethical Review Panel of the School of Pharmacy and Life Sciences at Robert Gordon University, Aberdeen, UK.

Method**Design**

A qualitative approach of semi-structured, one-to-one telephone interviews.

Setting

The study was carried out in the North-East of Scotland.

Recruitment

Invitation letters and participant information leaflets detailing the purpose of the study were mailed to all 135 registered community pharmacies in the Grampian area, North-East of Scotland. The letter was addressed to the ‘Pharmacy Manager’ who was requested to circulate to all pharmacists and MCAs. If interested in participating, they were asked to complete and return a study consent form along with a short demographic questionnaire, either by post or by following the dedicated study web link provided. To further encourage participation, all pharmacies were made aware of the study via an email message from the area National Health Services (NHS) Director of Pharmacy. Two reminder invitations were sent at 3-weekly intervals.

Interview schedule development

The semi-structured interview schedule was developed with reference to key domains describing professional practice (i.e. awareness and knowledge, skills, practicalities, motivation, acceptance and beliefs) and contextualised with policy documents and published research on community pharmacy based weight management [10, 16–18]. Interview questions were aligned to the main topics set out in the National Institute for Health and Clinical Excellence (NICE) ‘How to change practice’ documentation aimed at understanding barriers to change [20]. The interview schedule was reviewed by five pharmacy practice academics and practitioners followed by separate pilot interviews with one pharmacist and one MCA, who were excluded from the study. Piloting resulted in minimal changes to question wording; core questions are listed in Box 1.

Interviews

Interviews took place between October and December 2011. Telephone interviews lasting 10 to 12 min were audio-recorded and transcribed verbatim, with a random sample of five transcripts checked for reliability of transcribing.

Analysis

A thematic approach [21] was employed to identify examples of the overarching domains of professional practice. Themes were inducted from the data independently by two researchers and agreed by the research team. These themes are described using illustrative quotes, with each interviewee assigned a consecutive code (P, pharmacist and MCA, medicines counter assistant).

Results

Of the 53 responses received, 51 interviews were conducted with 31 pharmacists and 20 MCAs, with the remaining two unable to be contacted during the study period. Personal and practice demographics are described in Table 1.

The majority of interviewees were <40 years of age (55%), had been in their current role for 10 years or less (68%) and almost all worked in pharmacies providing some level of weight management services.

Awareness and knowledge

Pharmacists and MCAs described a range of weight management services provided including: measurement of weight, waist, calculation of BMI, body fat, advice on healthy eating and supply of weight loss products. A key theme described by pharmacists and MCAs was that customer enquiries and support were infrequent and opportunistic, often linked to the purchase of products, such as nicotine replacement therapy, or supply of prescription medicines for cardiovascular conditions.

“The people who come into pharmacy talk about their daily life during conversation, it pops up and we talk about it, but not because they want to buy or ask for advice” [P22]

“Yeah, I would think that weight goes hand in hand with sort of many disease states that people have, like hypertension and diabetes, and everything so I think it’s important not just to focus on their medication and look at wider things that pharmacy can offer” [MCA1]

Pharmacists and MCAs were all able to clearly describe how the services available in their pharmacy were provided, including the availability of private consultation areas, step-by-step procedures, products and related schemes as well as general advice on diet and lifestyle. While some identified barriers around the availability of resources, others acknowledged the potential for community pharmacies to become more integrated with other local primary care services.

I think these types of services definitely integrate us more closely with the NHS... [P12]

Motivation

Pharmacists and MCAs generally described positive attitudes and clear motivation for pharmacy to play a greater role in providing locally accessible weight management services. They remarked on the ease of access to pharmacy

Table 1 Personal and practice demographic data (n = 51)

Characteristics	n	%
Role		
Pharmacist	31	60
Medicines counter assistant	20	40
Age		
≤ 29 years	20	38
30–39 years	9	17
40–49 years	10	21
50–59 years	10	21
60 years or above	2	4
Gender		
Male	11	21
Female	40	79
Years in current role		
≤5 years	23	47
6–10 years	11	21
11–15 years	7	13
16–20 years	1	2
>20 years	9	17
Employment status		
Owner	7	13
Manager	19	36
Other employee	25	51
Working hours		
Full time	36	72
Part time	15	28
Type of community pharmacy		
Independent (1 pharmacy)	9	17
Small multiple (2–4 pharmacies)	10	19
Medium sized multiple (5–25 pharmacies)	6	11
Large multiple (>25 pharmacies)	26	53
Setting		
Urban	23	47
Suburban	10	19
Rural	18	34
Weight management services offered		
Weight measurement	39	74
BMI calculation	42	79
Body fat measurement	10	19
Healthy eating advice	39	74
Waist measurement	26	53
Advice on weight management	36	68
Supply or sale of weight loss products	49	92
None of these	1	2

services as a motivating factor both for staff and pharmacy customers and asserted that weight management services aligned well with other services already provided.

I think it's the ideal place to provide them because it's a drop in service...when people are motivated, we need to react, a bit like the NRT [nicotine replacement therapy] scheme, you know, it needs to be ready when they are ready [P8]

I definitely believe pharmacy is well placed to provide that level of service and we tend to have a good soft relationship with our patients. I think the success of the nicotine replacement therapy service shows that in elements of public health like weight management I think pharmacy could have a very successful role. [P12]

In addition all interviewees were unanimous in recognising and valuing the provision of these services as a role extension for personal benefit and job satisfaction.

... ultimately, there is a lot of professional satisfaction to be gained from engagement with services of the nature [P12],

...it's an added bonus to my job, yes I enjoy it [MCA3]

Acceptance and beliefs

Most pharmacists and MCAs thought customers were more comfortable seeking support for weight management in their local pharmacy rather than through their physician but it is noteworthy that some MCAs expressed that their own personal choice would be to consult their GP.

I think a lot of people in general don't like going to their doctor about things, they can feel a lot more comfortable coming into the pharmacies [MCA4],

I think if it was myself, personally...I would go to a doctor rather than in a shop [MCA5]

A possible explanation is the assertion by both pharmacists and MCAs that, while they were convinced of the evidence of dietary modification and exercise, they were more sceptical about the benefits of any of the weight loss pharmaceutical products available.

...it always says on the products to follow a low fat diet but I mean if you are following a low fat diet and doing exercise anyway without the pills then it's going to work... [MCA20]

I'm not convinced at all that there's any need for them...you still get a lot of customers who think it's a magic pill and they can still eat what they like [P51]

While there was the genuine belief that customers would feel comfortable accessing weight management services through community pharmacies there was also an acknowledged lack of awareness by the general public of

services provided through community pharmacies. Pharmacists in particular raised scepticism about the success of such a service unless the perception of pharmacists and community pharmacy by the general public were changed.

I don't think they maybe realise the service is going to be there...

...I also think there is a hurdle, actually coming in and asking a pharmacist that is maybe running around like a headless chicken" [P20]

I think we would need to work at that whole concept before it would be widely accepted by patients [P29]

Skills

A wide range of comfort levels with the provision of weight management advice were expressed as 'quite', 'reasonably', or 'generally'. While some admitted that customer expectations and their own experience influenced how they delivered advice. Statements on training provided on aspects of weight management showed great variation for both pharmacists and MCAs. The training provided varied with health board professional leadership, pharmacy ownership and management as well as weight management product range.

...all our pharmacists are trained on healthy eating advice, they've all been sent to a course in London... [P15]

Well, the pharmacist advises us and we [...] get a lot of bump of the information from the drug company as well [MCA10]

Pharmacists interviewed, welcomed more training in clinical conditions, nutrition and motivational skills while MCAs, although less confident in their abilities, did not describe specific areas of training need.

I would like a proper training, I mean it's alright for me to say I'll use my experiences [...] but I mean there might be something that I am missing [MCA12]

I would like more training in the dietary side of things [P9],

Probably how to keep people motivated and maintain the weight [P6],

Practicalities

Setting weight loss targets for individuals was uniformly frowned upon however some recognised the potential benefit of aligning weight management service targets with other community pharmacy services, such as the smoking

cessation programme. While the need to continue raising public awareness of community pharmacy was still evident, many pharmacy staff would welcome a national weight management scheme based on sound dietary advice. There was a clear will and growing confidence amongst pharmacy staff to provide weight management services but an indication the structures did not exist to make it happen.

I genuinely believe that pharmacy could engage much more heavily in this service and I think it could become part of the core services in tandem with NRT replacement. I think if that was the case there would have to be a fairly robust training programme in place perhaps at local and national level. [P12]

Yes, we have the expertise and we would have no problem as a profession but it's whether or not it's something which is of value and will make a real difference to the end user: I would challenge that [P29]

Discussion

Pharmacists and MCAs reported clear benefits for both staff and customers from providing weight management services through community pharmacies. Benefits included ease of access, a friendly environment and continuation of other public health services already provided. They were unanimous in recognising and valuing these services as an extension to their professional roles and reported increased job satisfaction. Despite these perceived benefits, weight management services in community pharmacies remain opportunistic and reactive in nature. Respondents attributed this to a lack of awareness amongst the general public of the services available to them locally within community pharmacy. Variation in provision of training around weight management was reported which was reflected in the range of comfort levels when providing dietary and lifestyle advice, and undefined lines of responsibility. While both pharmacists and MCAs were convinced of the evidence of dietary modification and exercise, they were more sceptical about the benefits of any OTC weight loss products. Despite these challenges, pharmacists and MCAs perceived community pharmacies to be well placed to successfully deliver such public health initiatives and suggested a nationally designed and promoted weight management scheme.

The Scottish Government has recently published, 'Prescription for Excellence', which is a strategic vision and action plan for the right pharmaceutical care through integrated partnerships and innovation [22]. This document articulates the need to adapt new and innovative models to facilitate professional independence of pharmacists, working in collaborative partnerships. Notably,

there is emphasis on providing quality pharmaceutical care to every patient through a variety of measures, including better utilisation of the pharmacy workforce. The roles, responsibilities and functions of MCAs, and pharmacy support staff generally, are changing throughout the world [23]. To date, there is a paucity of research which focuses on MCAs and is largely limited to general advice giving, [24–27] and oral health [28]. Our study adds to the evidence base around MCAs and has demonstrated that while they value their involvement in weight management, confidence levels were variable. This may be partly the result of inconsistent and sometimes absent training for MCAs and pharmacists, which should be addressed. It is highly likely that pharmacist training and confidence will have a marked impact on MCA training and hence practice. Training should extend beyond the ability to provide information but also have emphasis on the complexities of achieving behavioural change, which has been demonstrated to be essential to the maintenance of weight loss [29]. A national survey investigating pharmacists' and pharmacy assistants' current weight management recommendations to consumers across 3000 Australian community pharmacies identified the same need for pharmacy-specific education resources and training highlighting that while Australian pharmacists and pharmacy assistants appear to be providing weight management services, not all their recommendations are evidence based [30]. Pharmacists and MCAs commented that the delivery of weight management services in community pharmacy was largely opportunistic and at the request of individual customers. While a wide range of weight loss services (e.g. BMI measurement, healthy advice) was available, it was perceived that the general public were largely unaware. This finding is in accord with a survey of the Scottish general public, who were also unaware of the range of public health services available in community pharmacies [17]. A systematic review conducted in 2004 identified that not only is consumer usage of pharmacies for general health advice low, but pharmacists are perceived as 'drug experts' rather than experts on health and illness [31]. This general issue requires to be addressed through appropriate marketing of services and targeting of individuals, as highlighted in a more recent systematic review of the views of consumers of community pharmacy public health services which noted very little change in customers' attitudes in the past decade [32]. Consumer perspectives about weight management services in particular echoed the findings of a study by Um et al. [33] which used an online cross-sectional consumer survey to gain the views of 403 consumers of community pharmacy services in Australia. Most customers considered

pharmacists' motivation to be profit driven and expressed concerns over their perceived lack of expertise, time and conflict of interest [33]. Comparing the experiences of female pharmacy consumers with weight loss treatment in Australia ($n = 460$) and the UK ($n = 220$) echoed a more universal issue and illustrated that while women in the UK were less likely to have approached a community pharmacy for weight management advice, female pharmacy consumers in both Australia and the UK would ultimately feel comfortable with pharmacists being involved in the provision of weight management recommendations [34].

Of interest is the finding that pharmacists and MCAs had little belief in the benefits of and evidence for OTC weight loss products, which was also a key finding of a cross-sectional survey of pharmacists in the UK [35]. Survey respondents also noted the high value placed by customers in messages obtained from the advertising of these products on television and magazines. This can result in a dilemma for pharmacy staff trying to deliver evidence based advice around promoting lifestyle change through diet and exercise to customers who may be expecting a 'quick fix' solution. A study looking at reasons for weight loss failure clearly showed that successful weight loss can not be achieved by medical solution alone but needs to address behaviour change [36]. In light of this, our study results infer the need for a comprehensive weight management plan which not only addresses the health beliefs of customers but also that of pharmacy staff who will be acting as advisors. There are around 1000 weight loss products listed in Australia and around 1600 in the USA and although these formulations are more tightly regulated in the UK, few are licensed. Hackett and Krska [37] therefore asks whether it is time to regulate OTC weight-loss products, citing lack of adequate controls, pharmacists' beliefs and lack of adequate pharmacist knowledge as the main drivers.

Regardless of their reservations, all pharmacists and MCAs were supportive of delivering community pharmacy weight management services. However, it is clear that there is an urgent need for a practice model which is systematically developed from a theoretical base, considers the views of key stakeholder groups (e.g. customers, physicians, nurses, pharmacists), and is feasibility tested and evaluated in terms of effectiveness and cost effectiveness [38]. Such an approach is in line with the UK Medical Research Council Framework for Complex Interventions [39]. Pharmacists themselves suggested a nationally designed and promoted weight management scheme akin to the successful smoking cessation 12-week nicotine replacement therapy service already available in community pharmacies across Scotland [40].

Strengths and weaknesses

To our knowledge, this is the first study which has explored the perspectives of both pharmacists and MCAs in the UK. Further strengths include the diversity of community pharmacy types (e.g. multiple, small independent), settings (e.g. rural, urban) and the sample sizes for pharmacists and MCAs which allowed comparison across and within emerging themes. Furthermore, the interview schedule was grounded in domains of professional practice. The key limitations are potential recruitment bias, the self-reported nature of the data hence potential issues of data credibility and the lack of evidence for the transferability of findings from this study conducted within one geographical area of Scotland. However, it is likely that the findings will resonate with many pharmacists and counter staff worldwide.

Conclusion

This study aimed to provide the perspectives of the community pharmacy team on the provision of weight management services in community pharmacy. Pharmacists and MCAs interviewed in this study reported their perceptions of benefits to providing community pharmacy based weight management services as part of a wider public health function. However, they described the service as opportunistic and customer driven with notable variation in pharmacist and MCA training, reflected in their levels of comfort and confidence. Most cited concerns around the expectation of benefits from OTC weight loss products. There is a clear need to systematically develop and provide evidence of effectiveness, in terms of sustained weight loss, and cost effectiveness for a pharmacy based practice model with key roles and functions for the whole pharmacy team.

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