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RESEARCH ARTICLE

Managing obesity in pharmacy: the Australian experience

Irene S. I. Um · Carol Armour · Ines Krass · Timothy Gill · Betty B. Chaar

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Abstract *Objective* To explore pharmacists' opinions about the provision of weight management services in community pharmacy and their attitudes towards the establishment of an accredited training course in weight management in pharmacy. *Setting* Interviews were conducted with practising pharmacists on site in various community pharmacies in metropolitan Sydney, Australia. *Method* In-depth, semi-structured interviews with twenty practising pharmacists were conducted. Of the twenty interviewed pharmacists, sixteen were involved in the provision of one or more pharmacy based weight management programs in their pharmacies. Interviews were audio-recorded, transcribed and analysed using the grounded theory approach. *Main outcome measure* The data were thematically analysed to identify facilitators and perceived barriers to the provision of high quality services, and pharmacists' willingness to undertake training and accreditation. *Results* Participants clearly perceived a role for pharmacy in weight management. Key facilitators to provision of service were accessibility and the perception of pharmacists as trustworthy healthcare professionals. The pharmacists proposed collaboration with other healthcare professionals in order to provide a service incorporating diet, exercise and behavioural therapy. A program that was not-product-centred, and supported by ethical marketing was favoured. Appropriate training and accreditation were considered essential to assuring the quality of such services. Barriers to the provision of high quality services identified were: remuneration, pharmacy infrastructure, client demand and the current marketing of product-centred programs. *Conclusion* Australian pharmacists believe there is a role for pharmacy in weight management, provided training in accredited programs is made available. A holistic, evidence-based, multi-disciplinary service model has been identified as ideal.

Keywords Accredited pharmacists · Australia · Community pharmacy · Obesity · Pharmacy services · Weight management service

Impact of findings on practice

- Community pharmacy provides an ideal setting to help in the prevention and management of Australia's weight management problem.
- Australian pharmacists are earnest and willing to participate in accredited evidence-based weight management programs.
- In order to achieve practice change, facilitators of change such as evidence-based training, a multidisciplinary approach, remuneration and support systems must be in place.
- Pharmacy organisations and government need to collaborate with community pharmacists to establish a credible weight management service in pharmacy in Australia.

I. S. I. Um · C. Armour · I. Krass · B. B. Chaar (✉)
Faculty of Pharmacy, The University of Sydney, N508, Pharmacy and Bank Building A15, Sydney, NSW 2006, Australia
e-mail: betty.chaar@sydney.edu.au
URL: http://sydney.edu.au

T. Gill
Faculty of Medicine, Boden Institute of Obesity, Nutrition and Exercise, The University of Sydney, Sydney, Australia

Introduction

Obesity: the problem

Obesity is a major global public health and economic problem as it is associated with significant morbidity and mortality. In 2005, the World Health Organisation [1] reported approximately 1.6 billion adults as overweight; 400 million of those were obese. Australia is one of the most overweight developed nations. The most recent data collected have shown a growing incidence over 12 years; approximately 68% of adult men and 55% of adult women were overweight or obese in 2007–2008 [2]. The total cost of obesity in 2008 was AU$ 58.2 billion which included the costs attributable to associated diseases [2].

Obesity is defined as a body mass index (BMI) equal to or greater than 30 kg/m^2 [3]. Excess weight is associated with other medical conditions, for example, type 2 diabetes mellitus, and cardiovascular disease [4, 5]. Modest weight loss of 5–10% of starting weight has resulted in significant health benefits [4].

In response to this problem the Australian government in June 2009, recommended strategies for the treatment, management and prevention of obesity in Weighing it up—Obesity in Australia [6]. Better regulation of weight loss products and programs to ensure safety and efficacy was recommended [6]. Whilst general practitioners were identified as resources to identify patients at risk of obesity and implement management plans, there was no mention of the role of pharmacy [6].

Weight management in the community pharmacy

The expertise of pharmacists and their accessibility to consumers are often overlooked by health policy makers in Australia [7]. One reason may be that there is a general perception that the role of pharmacists is the traditional model of dispensing and supply of medicines. However, in the past decade, pharmacists in Australia have gradually redirected their focus to a patient-centred approach with the introduction of professional pharmacy services such as Home Medicines Review (HMR), the Diabetes Medication Assistance Service (DMAS) and the Pharmacy Asthma Management Service (PAMS) [8]. These services have been facilitated by targeted government funding under the Second, Third and Fourth Community Pharmacy Agreements [9].

In the context of weight management, the United Kingdom (UK) government recognised the contribution that pharmacy can make in managing obesity in the White Paper Pharmacy in England (2008) [10]. In doing so, pharmacy contract negotiators recommended a government-funded national weight management service initiative in community pharmacies [11]. In 2007, the UK Department of Health had funded a pilot weight management service delivered by 10 pharmacies in the Coventry Primary Care Trust, which provided compelling evidence to support establishing weight loss programs in pharmacy [10, 12]. Several other studies have illustrated that community pharmacists' involvement in weight loss programs has also been successful. A study in Denmark (1999) [13] reported the results of "slimming courses" held at 19 community pharmacies for 269 obese patients. Average weight loss was 5.3 kg for females and 6.2 kg for males. At 1 year follow-up 20% of the patients who had completed the course had maintained a weight loss of greater than 5 kg.

Another example is the weight management service provided in a single pharmaceutical care centre on a college campus in the United States of America (USA) between 1996 and 2006 [14]. The intervention consisted of an initial consultation with the pharmacist, with fortnightly follow-ups until target weight was reached, with 3-monthly reviews. Data were collected from 226 patients over 7 years and revealed a mean individual weight loss of 3.6 kg at 26 weeks. It was also found that 60% of the patients in the study with uncontrolled blood pressure at baseline had controlled their blood pressure by their last consultation. However, these studies used single group repeated measures designs with no control group.

In Australia, a government-funded investigation, the Community Pharmacy Weight Management Project (2005), evaluated weight management programs offered in Australian pharmacies [15]. The study found weight management programs in community pharmacy were generally product-related and lifestyle factors were raised primarily to augment the associated product. There was lack of evidence to support any claims of efficacy of such programs. An example of one such program was Lifeweight™. This program combined the product Xenical® (orlistat) with pharmacist-delivered cognitive services. It had been launched in 2004, following the down-scheduling of orlistat from Prescription Only to Pharmacist Only Medicine. However, over time the uptake of Lifeweight™ in community pharmacies progressively declined. Rieck et al. [15] suggested that this may have been due to the decrease in consistency and quality of service as a result of no formalised accreditation process to uphold standards.

More recently, criticism of pharmacy-based programs has emerged in the popular media (January, 2009) [16]. The reasons given were the inadequate training of consultants, lack of individual tailoring and the perceived product-focussed approach for financial gain [16]. This reflected a change in consumer attitude towards pharmacy, as pharmacists have consistently remained one of the most trusted, highly regarded professionals in Australia [17].

While several studies have identified physicians' attitudes towards weight management, no studies have explored pharmacists' perspectives on their role in the management of obesity in Australia.

Aim

The aim of this study was to explore pharmacists' views and experiences about weight management services in the community pharmacy setting, in metropolitan Sydney, Australia.

The objectives were to:

- Explore pharmacists' views about their role in weight management.
- Explore pharmacists' views and experiences with existing weight management programs offered in practice and their perceived effectiveness.
- Explore pharmacists' views about what an ideal weight management program might be and how it would be delivered in community pharmacy.
- Explore pharmacists' perceptions of the barriers and facilitators to adopting weight management programs in a pharmacy.
- Investigate pharmacists' perception of their knowledge, competence and confidence in the provision of weight management services.
- Determine pharmacists' interest in and willingness to pay for a generic accredited training course in weight management.

Method

The research project proposal (including Participant Information Statement, Consent form, Advertisement, Interview protocol) was approved by the University of Sydney Human Research Ethics Committee (Approval No. 11947) prior commencement of the study.

This was a qualitative study, using semi-structured interviews, which were thematically analysed using a 'grounded theory' approach. The interview protocol (Appendix 1) was developed based on the study objectives, and used uniformly to minimise interviewer bias and maintain consistency during the interviews.

We sampled from two groups of pharmacists, and generated a numbered list of each group. One group included pharmacists in the Sydney metropolitan area who could be identified as providing weight management programs through an Internet search, using terms describing the branded weight management programs mentioned in the Community Pharmacy Weight Management Project (2005) [15]. We then randomly sampled 30% of these pharmacies (every third pharmacy in the collated list) and sent each pharmacy an invitation to participate in the study via facsimile addressed to the Pharmacist in Charge.

The other group was randomly sampled from the general Register of NSW Pharmacists which does not identify involvement in any particular type of practice. We collated a list of pharmacists registered in the Sydney Metropolitan area by postcode, and randomly selected every third name in the collated list to invite. The purpose of generating a second sample was to include pharmacists who may not necessarily be involved in weight management programs. Once again pharmacists were invited to participate through an invitation distributed via facsimile to the pharmacy they worked in.

Each invitation was followed up with a telephone call by the researcher to arrange for an interview with any pharmacists willing to participate. The invitations sent ahead of the telephone call by the researcher asking for participation, were meant to elicit interest and give the pharmacist a chance to read about the topic and ample notice to be prepared for the call. Once the pharmacist had agreed, s/he was provided with a Participant Information Statement and asked to sign the approved Consent form.

Semi-structured interviews were subsequently conducted with participating community pharmacists in the Sydney metropolitan area, NSW, Australia. The interviews were conducted on site in the various pharmacies between August–September 2009, and continued until 'saturation' was reached, that is, until no new themes emerged.

The interviews were audio-recorded and transcribed verbatim. Participants were de-identified and all collected data, along with consent forms and audio recordings interview transcripts were stored in a secure location according to the University of Sydney Human Ethics requirements. Transcribed interviews were entered into the NVivo 8.0 software and independently coded by two researchers. Themes were verified between researchers before a theory was generated.

Results

Saturation was reached after 20 interviews had been conducted. Of these participants, 16 were involved in the provision of one or more pharmacy-based weight management programs. Most of the ten programs provided by the participants were based on meal replacement products and the pharmacist was the primary consultant in three of these programs (Ultralite, Meditrim and Healthy E-Weight). One pharmacy provided more than one weight management program (Table 1). All participating pharmacists were working in pharmacies within the Sydney

Table 1 Observed pharmacy-based weight management programs

Program	Frequency	Observed components
Betty Baxter Complete	3	Meal replacement product + consultant
Celebrity Slim	1	Meal replacement product + consultant
Club Optislim	3	Meal replacement product + consultant
Dr Tim's	1	Meal replacement product + consultant
Healthy E-weight	1	Meal replacement product + pharmacist
Isowhey	1	Meal replacement product + naturopath
Meditrim	1	Meal replacement product + pharmacist
Tony Ferguson	1	Meal replacement product + consultant
Ultralite	4	Diet plan + supplements + pharmacist
Xndo	1	Meal replacement product + consultant

metropolitan area, five of which were situated in large, spacious locations, with the remaining pharmacies of average to small size settings.

Very little difference was found between data collected from participants who were involved in weight management programs and those who were not. Those not involved in programs cited some barriers (described further on) that others did not mention or had experienced. Otherwise the majority of views and experiences were similar.

Analysis of the data revealed five main themes:

(1) The perceived role of the pharmacist in weight management
(2) Balancing marketing and credibility
(3) Models: product versus service
(4) Vision for training modules
(5) Factors influencing provision of service

The following are descriptions of the themes identified by the qualitative analysis of the interviews, supported by illustrative quotes.

(1) The perceived role of the pharmacist in weight management

Pharmacists participating in the study unanimously expressed positive views on the role that a pharmacist can play in weight management. The majority recognised the growing obesity problem in the community and believed it was their professional responsibility to take a more proactive role in public awareness and weight management. Accessibility and pharmacists' existing knowledge (from their pharmacy degree studies) were commonly cited to be the facilitators in providing a weight management service in a community pharmacy setting.

Many participants considered that such services build on the trust that patients have in pharmacists. The established good rapport between patient and pharmacist were regarded as an integral part of pharmacy practice. Interviewees also perceived that patients are more comfortable talking to pharmacists than to GPs.

> Example of the perceived role
>
> We're ideally situated in the community to provide such a service. (Interview 3)
>
> Example of the accessibility theme
>
> I think pharmacists are very accessible for customers who are in that bracket that need to be losing weight. (Interview 4)
>
> Example of patient trust theme
>
> They naturally trust the pharmacist's opinion. (Interview 4)

(2) Balancing marketing and credibility

The weight loss industry was viewed to be highly competitive, with some well established and branded weight loss programs that already have high market profile. Participants believed branding and marketing was essential to raise community awareness as the public may not be aware of the pharmacists' role in weight management. They expressed the view that without branding or marketing, generating demand and customer recruitment would be difficult in such a competitive and saturated market.

However, many pharmacists lacked confidence or were uncomfortable promoting their current role in weight management programs. They expressed concern that presently, pharmacy weight loss programs are based on product sales, with potential to create a negative impression on the public and other healthcare professionals. Rather than being perceived as the provision of professional services, marketing of current weight management services could be perceived as a strategic business plan to generate sales, thereby diminishing credibility.

Most interviewees endorsed the proposition that accreditation and training would lead to greater recognition of their professional expertise in weight management services. They expressed the need to gain support from various educational or industry organisations such as a university, the Pharmacy Guild of Australia (representing pharmacy owners in Australia) or the Pharmaceutical Society of Australia (representing practising pharmacists in Australia), to facilitate in accreditation and training. It was further emphasised that only trained and accredited pharmacists should provide weight management services to ensure the consistency and quality of service throughout the profession.

Example of branding and marketing theme

I think it's more advertising and high profile that's driving the success of some programs. (Interview 13)

Example of concern for credibility

I'm a bit uneasy about promoting it too much so that it isn't seen as just another way of making money…doctors are very suspicious of what pharmacists do. (Interview 11)

Example of value of accreditation

The Pharmaceutical Society or the Pharmacy Guild or the University has to endorse one particular course that is good and recognised. (Interview 10)

(3) Models: product versus service

The majority of participants raised concerns over product-based programs, criticising the lack of monitoring and counselling associated with product sales. Many expressed the view that meal replacement programs were not appropriate weight loss solutions as they do not educate the importance of lifestyle modifications. Other related problems were cited, such as "yo-yo dieting", maintenance of weight loss and lack of evidence for the products.

Participants proposed the ideal weight management program model to be service-based, incorporating various elements such as diet, behavioural therapy, exercise and if necessary, a product. It was suggested by participants that consultation and monitoring would be the foundation of the program and this would support maintenance of weight loss, providing a long-term weight loss solution. Potential for collaboration with other healthcare professionals such as general practitioners and exercise physiologists was supported. A few pharmacies were presently collaborating with local gyms, dieticians and exercise physiologists and found it to be beneficial for the patients. It was also highlighted that the service should assess risk for other obesity-related problems, e.g. monitoring blood glucose levels and blood pressure.

In addition, remuneration was regarded as a key facilitator for pharmacists to provide this service-based program. Payment on a fee-for-service basis was proposed to cover additional workload involved in supporting the program, particularly the pharmacist's time. A fee-for-service approach would also allow the patient to recognise the specialised knowledge and skills of the service, beyond the usual non-fee pharmacy services.

Example of concern over product-based programs

I'm very sceptical of the meal replacement based programs because they don't teach people what they should be eating, they're largely designed on selling product rather than changing people's lifestyles, and only giving good income to the manufacturer. (Interview 11)

Example of proposal for ideal weight management program model

You would need to create a program that's got a start and an end so it might be a 12 week program or something like that. Where customers can choose to continue if they want but I think it's good for them to have a goal to aim for initially. I think it would need to involve their lifestyle issues of what they're eating currently, exercise, smoking, alcohol and all the rest. I think nutrition if we can get a good basis for that or refer onto an expert, it would be good. I think also we need a basic feeling for what is a good exercise regime for different people or collaborate with a local gym. Maybe even right down to training about how to conduct yourself professionally in a consultation… The most important part needs to be rolling out in store and assisting with marketing, referring and talking to doctors. (Interview No. 6)
We should be working with GPs, exercise physiologists, naturopaths. (Interview 14)

Example of fee-for-service theme

I'd like to see more of a service based program and fee for service weight loss system. (Interview 4)

(4) Vision for training modules

Most interviewed pharmacists currently providing weight management programs had completed some previous training tailored for the commercial programs they offered in their pharmacy. Despite this, they considered there was little or no formal training in weight management related issues such as diet, exercise or behavioural therapy. Most

pharmacists expressed their willingness to pay for training and accreditation in the future.

Training topics deemed necessary included: diet, exercise, behavioural therapy, pharmacology of medicines, obesity related problems such as diabetes, hypertension, dyslipidaemia, monitoring obesity parameters and communication skills.

Many identified that workshops had the added benefit of being able to interact with the trainer. They agreed that some of the modules could be done online, so a combination of both online modules and workshop was proposed as ideal. Most respondents agreed that 1–2 days would be adequate to cover the training topics. Some referred to other successful pharmacy-based initiatives in Australia, e.g. Home Medicines Review (HMR) and Diabetes Medication Assistance Service (DMAS) that have set a precedent for training.

Example of need for training

Pharmacists are not equipped in nutritional food aspects like calorie-content. (Interview 13)

Examples of training topics

Dietary requirement and exercise physiology are important areas to know. (Interview 17)
There needs to be a component on coaching, communication, role plays and screening. (Interview 14)

Examples of training design

There should be a component done online but there needs to be a face to face workshop to bring it all together … a bit like the DMAS training. (Interview 14)

Example of training duration

Pharmacists should be going into that advanced depth of knowledge probably in a two day weekend. (Interview 14)

Example of willingness to pay

I don't mind paying as long as this allows the pharmacy to recruit back the money we invest. (Interview 20)

(5) Factors influencing provision of service

The main reason for some participants not providing pharmacy-based weight management programs was the lack of demand. Other factors influencing provision of service were infrastructure, including staffing, time management, work constraints, administration and physical space. Many participants stated such a weight management service would only be possible where there is more than one pharmacist on duty to provide the service and time for consultations. Expenditure on marketing activities was also cited to be of importance to generate market profile and enhance consumer recruitment.

Example of clientele and demand theme

It's difficult here because we don't have the clientele or demand for weight management. (Interview 7)

Examples of infrastructure theme

Having enough staff to facilitate this is important. (Interview 2)
We need the space to set up a booth or consulting room. (Interview 20)

Example of marketing theme

Advertising expenses would be quite high. (Interview 1)

Discussion

The findings of this study indicated that pharmacists are interested in a more progressive role in Australia's battle against obesity. Pharmacists are willing to be involved in the provision of a future weight management service provided that the model is evidence-based and not product-focussed, and there is support from pharmacy organisations. A range of facilitators for establishing such a service in the community pharmacy setting was identified.

Perceptions of the public: accessibility and trust

In terms of accessibility and trust, pharmacists are considered one of the most accessible healthcare professionals. In Australia it has been estimated that every person visits a pharmacy on average 14 times a year [7]. Furthermore, pharmacists are recognised as having expertise and being trustworthy [18].

The literature suggests that patients desire direct and specific information on diet and exercise as well as help in setting realistic weight goals [19]. Consequently, pharmacists are in a favourable position to provide weight management services tailored to individual needs, providing monitoring and support. To support this, several studies have shown pharmacists' involvement in weight management services produce greater weight loss, improved health-related quality of life and greater persistence with therapy [20, 21].

The only drawback revealed in this study was the perception of conflict of interest, which arises because pharmacists have ethical and legal responsibilities towards their patients, but also need to maintain a viable business, hence

stand to gain from the sale of a weight-loss product [22]. This role conflict must be recognised and a balance achieved so that pharmacists do not allow business objectives to control their professional conduct [22]. The provision of a model of service that is not product-centred may alleviate this dilemma [23].

Collaboration

Due to the complex nature of obesity, for a service to be successful in treating and managing obesity it needs an integrated healthcare team approach. The National Health and Medical Research Council (Australia) [4] has recommended utilising services of various disciplines including general practitioners, dieticians, exercise physiologists, psychologists and other specialists depending on the individual's requirements. The Lifestyle Challenge Program (USA) [24] is an example of a multi-disciplinary team approach to weight management co-directed by a pharmacist and including a physician specialising in nutrition, a behavioural psychologist, a dietician and an exercise physiologist. Besides weight loss there was improvement in health-related quality of life, binge-eating behaviour and depressive symptoms. This program has shown that the pharmacist can contribute in a multi-disciplinary weight management model.

In providing a collaborative approach to weight management, healthcare professionals must work within the same framework to ensure consistency of service. In pharmacy, it is envisaged that the pharmacist will be the central figure in the service and their role to be one that co-ordinates other healthcare professionals in caring for the patient and monitors the patient's outcomes. Because of the increased frequency of pharmacist-patient contact, the pharmacist's role in weight management in Australia, similar to the pharmacist's role in the USA, would be expected to improve the success of weight loss and an individual's maintenance efforts [25].

Training and accreditation

This study revealed that Australian pharmacists believed that their current training did not equip them to adequately deal with the complexities of weight control. A similar theme emerged from a survey of 139 community pharmacists in Texas, USA, where a lack of expertise was identified to be a personal barrier associated with less comfort in counselling obese patients and confidence in achieving positive patient outcomes [26, 27]. This is not unique to pharmacy; Foster et al. [28] reported physicians also feel ill-equipped to treat obesity or believe that treatment is ineffective. However, a pilot study of professional tutoring found it was possible to improve physicians' weight loss counselling by focussing on communication and counselling techniques, and behaviour modification models [29]. In another study, a nutrition training program aimed at improving the quality of dietary consultations, demonstrated evidence of improved practitioners' knowledge concerning lifestyle and obesity as well as improved practitioners' attitudes [30]. Such training interventions offer potential solutions to addressing pharmacists' barriers to weight management counselling and education.

Furthermore, this study revealed a willingness of pharmacists to participate in training to obtain accreditation. Accreditation was identified to be a key facilitator in providing enhanced pharmacy services by 75.6% of community pharmacists in Australia who responded to the National Pharmacy Database Project in 2002 [31]. Accreditation was deemed essential to establish standards of practice, maintain quality and consistency, and provide remuneration of the service. Rieck et al. [15] recommended professional qualifications for pharmacists offering services should be developed and these will lead to accreditation processes endorsed and supported by appropriate pharmacy organisations and government.

Feasibility

Several elements must be present in order for pharmacy to successfully implement cognitive services. In the literature are various organisational facilitators including physical environment such as adequate space or privacy, sufficient staff, patient demand, marketing and remuneration, which are consistent with those reported in this study [32]. Similarly, the most commonly cited barriers to counselling obese patients by pharmacists were lack of time, followed by low patient demand, lack of reimbursement or a lack of private counselling area [26].

Participants in this study felt that appropriate remuneration was important, regardless of the source of that remuneration, for example, government, insurance or private payment. Christensen et al. [33] reported providing financial incentive to pharmacists resulted in increased cognitive services provision. Remuneration is related to consumers' recognition of the pharmacists' role and services [34]. Hence, marketing the value of the service that pharmacists provide has been recommended [32].

Marketing targeted towards the needs of the general public will create a demand that will also act as a facilitator for the provision of the weight management service in pharmacy [35]. Hence, pharmacy would be marketed as a destination for an accredited weight management service, placing it competitively against other commercially established programs. Also essential is creating an appropriate supportive working environment such as infrastructure and

sufficient staff to support pharmacists' extended roles in providing such a service [15].

Weight management in pharmacy

The themes identified within this study allowed us to develop a theory of facilitators for weight management and managing obesity in a community pharmacy setting (Fig. 1). Factors such as remuneration, pharmacy layout, patient expectations, external support and assistance and communication and teamwork have all been previously identified in earlier research as influential in bringing about practice change in community pharmacy [36].

Establishing a weight management service in pharmacy is dependent on a number of factors which should facilitate the development of a comprehensive, trustworthy program, easily accessible to the public. Providing a service-based program may alleviate the perception of conflict of interest associated with product-based programs. The weight management service proposal based on these factors may subsequently attract government support and promote the pharmacist as a reliable healthcare provider who can play an important role in weight management.

Careful consideration of facilitators and barriers identified in this study may enable the pharmacist to play a more prominent role in managing Australia's obesity problem. With recognition of the role of an evidence-based accreditation program, inter-professional collaboration, remuneration and the support of government and professional organisations, there is potential for pharmacy to move forward in this domain for the benefit of the Australian community. It will, however, be important to explore the best venue/models of pharmacist delivery of weight management services and to develop business cases around the different models to position pharmacy either alone or preferably within a multidisciplinary healthcare team, against other established providers of weight management services (such as Weight Watchers). And, in order to achieve consensus for a service model of this nature it will also be crucial to engage relevant organisations both from within the profession and external to pharmacy in decision making, analyses and roll out. Government support would no doubt greatly improve the likelihood of reaching such a consensus.

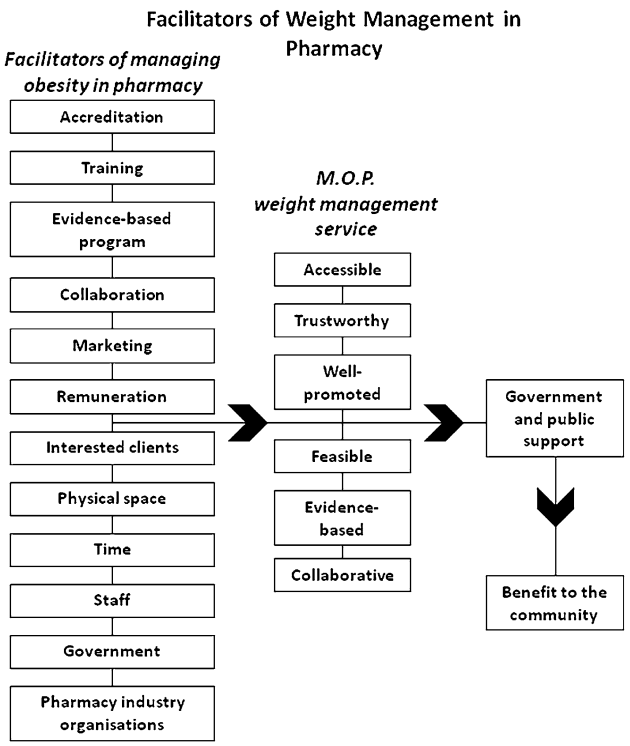

Fig. 1 The facilitators of weight management in pharmacy theory proposed from emerging themes

Limitations

Due to the nature of qualitative studies the views expressed in this study may not be representative of all Australian pharmacists as many participants in the study were presently involved in the provision of branded weight management programs and therefore may be in favour of professional services. In addition, the sampling method and sample size does not facilitate comparisons of the different branded programs. Further research to support the findings of this qualitative study is needed to provide insight into societal and professional requirements for the development of a weight management service in pharmacy.

Conclusion

Pharmacists in Australia are eager to participate in accredited training for the provision of weight management services in the community and to complement the roles of other healthcare professionals in managing Australia's obesity problem, without the perception of conflict of interest. To achieve this, the facilitators of practice change must be considered and addressed, including infrastructure, marketing and training support to deliver adequate services to the public. Pharmacy organisations and government need to work together to support community pharmacists implement change to help fight against the scourge of obesity.

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Conflicts of interest The Author(s) declare(s) that they have no conflicts of interest to disclose.

Appendix 1

Interview protocol

(1) What is your opinion about the role that the community pharmacist should take in weight management?

Prompts:

- Just selling products
- Should have important role in education
- Other professionals and what they are doing
- Knowledge and skills of pharmacists
- Community need
- Consumer demand

(2) Which of the weight management programs available in the wider community and in pharmacy are you familiar with? What is your opinion of these programs?

Prompts:

- Effectiveness
- Evidence based
- Comprehensive
- Attractive to consumers
- Profitable to the pharmacy

(3) Do you offer any weight management programs in your pharmacy?

If **YES**, Please describe the program you have in your pharmacy

(a) What are your reasons for choosing that particular one?

Prompts:

- Effectiveness
- Attractive to consumers
- Profitable to the pharmacy

(b) What did you do before you commenced the program in terms of learning how to deliver it?

(i) Training or education

OR

(ii) If **NO** training, where did you acquire your information from in dealing with weight management counselling?

(c) How confident are you in providing the program?

- How confident are you in providing weight management counselling in general?

(d) How/where do you go to deliver the program?

Prompts:

- Consulting room
- Equipment

(e) How are outcomes assessed?

Prompts:

- Weight monitoring? Frequency? Duration?
- Retention within program
- Participant adherence
- Return for more product
- What in your experience is the level of success or uptake of the program?
- Were there any disadvantages of this program? If so, what would you change to improve it?

If **NO**, What are your reasons for not providing a program?

(a) Do you think that pharmacy is suitable to provide this service?

(b) What would need to change for you to initiate a program for weight management in your pharmacy?

Prompts:

- Remuneration
- Demand
- Availability of programs
- Training available

(4) What about the feasibility of initiating a program in pharmacy?

Prompts:

- Infrastructure
- Staff

(5) How would you describe the ideal weight management program in community pharmacy?

(6) Given the opportunity, would you be interested in participating in an accredited training course specifically tailored for pharmacists?

(i) What topics and skills do you think it should cover?

(ii) What format should it take?

- Modules for self study and/or
- Lectures/seminars/workshops/e-learning

(iii) How much time would you be willing to devote to attend such a training course?

(iv) Would you be willing to pay for such an accreditation course? If yes, how much?

(7) Is there anything further you would like to add?

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