

Women, pharmacy and the World Wide Web: could they be the answer to the obesity epidemic?

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Abstract

Objectives The objective of this article is to explore how giving women access to evidence-based information in weight management through pharmacies, and by utilising the World Wide Web, is a much needed step towards dealing with the obesity crisis.

Key findings Women's needs should be considered when developing evidence-based information on weight. Excess weight places them at high risk of diabetes and cardiovascular disease, infertility and complications following pregnancy and giving birth. Women are also an important population group because they influence decision-making around meal choices for their families and are the biggest consumers of weight-loss products, many of which can be purchased in pharmacies. Pharmacies are readily accessible primary healthcare locations and given the pharmacist's expertise in being able to recognise underlying causes of obesity (e.g. medications, certain disease states), pharmacies are an ideal location to provide women with evidence-based information on all facets of weight management. Considering the exponential rise in the use of the World Wide Web, this information could be delivered as an online educational resource supported by other flexible formats.

Conclusions The time has come for the development of an online, evidence-based educational resource on weight management, which is combined with other flexible formats and targeted at women in general and according to different phases of their lives (pregnancy, post-partum, menopause). By empowering women with this knowledge it will allow them and their families to take better control of their health and wellbeing, and it may just be the much needed answer to complement already existing resources to help curb the obesity epidemic.

When you think about the USA, the UK and Australia you might think of tourist destinations, the economy, theme parks, politics or beautiful gardens and beaches. However, these three countries have more in common than just pretty landscapes and political opinions. These countries are now considered to have the most obese populations in the world, with the highest percentage of English-speaking obese adults worldwide. Across these three countries over 60% of the adult population is considered overweight or obese based on body mass index (BMI).^[1] The high percentage of adult obesity in these countries has negatively impacted on the cost of health care and the cultural pressures these countries face, and has given these nations the task of preventing the rise in obesity. Every year money equivalent to billions of US dollars is spent by consumers, mostly women, on weight-loss products,

weight-management programmes, gym memberships and other weight-reducing methods to help tackle this ever increasing problem, many of which lack evidence of benefit. Even with this substantial amount of expenditure on weight-loss products and services, these nations are continuing to see a rise in the proportion of obese people in their population.

Genetics, hormones, environmental, psychological, endocrine and metabolic diseases, as well as certain medications, all predispose certain people to becoming overweight or obese. There are also causes of overweight and obesity that are specifically related to women, including polycystic ovary disease, hormonal changes, pregnancy and menopause.^[2] In women, overweight and obesity poses an increased risk of infertility, pregnancy complications and childhood obesity in the unborn child.^[2] It has also been shown that women have

an increased risk at the same BMI as men of developing conditions such as cardiovascular diseases, type 2 diabetes and certain cancers.^[3] Modest weight losses of 5–10% body weight have been shown to have significant benefits on overweight and obesity-related health conditions, including decreased blood pressure, cholesterol, blood glucose levels and more specifically in younger women, decreased fertility problems and complications in pregnancy and delivery.^[4]

Women are an important population group not only for the reasons above but also because they are often the 'decision makers' around nutrition and lifestyle in a household, consequently impacting on weight management for the entire family. Women who eat well also have the opportunity to influence their partners and their children to do the same and thus have the ability to positively impact on their entire household. Women are usually responsible for selecting groceries and preparing meals for their families and as mentioned earlier, are the biggest spenders on weight-loss products in the USA, UK and Australia.

One of the major problems in today's society is that almost every week, advertisements regarding the 'next biggest breakthrough' in overweight and obesity treatment appear on television, in women's magazines and various other media outlets, creating false hope for many who are battling with a weight problem. When new weight-loss treatments become available, it is often the most vulnerable who will seek information from media sources or ask for advice from family and friends. This content is almost always lacking rigorous evidence, usually has no benefit and can at times cause harm and make the consumer play the 'guilt game' by making them feel that they are to blame if the new 'fashionable' or 'trendy' diet does not work. It is therefore crucial that an up-to-date, easily accessible resource is available that is able to be tailored to individual needs to advise consumers about evidence-based weight management. In particular, women need readily available, unbiased and current information that also focuses on female-related conditions or life events such as polycystic ovary disease, pregnancy, post-partum events and menopause. It is also vital that women have information that is free from bias that they can share with their partners, families and friends so that achievable and healthy weight-loss goals and treatments are spoken about in a social environment.

Women are not only the biggest spenders on weight-loss products, but they also make up a large proportion of the consumer group that purchase weight-loss products and other related medications from community pharmacies. Community pharmacies are an ideal primary healthcare setting for women to receive weight-management advice because they are open long hours without the need for appointments, and attract both healthy and non-healthy individuals.

Pharmacists are also medication experts and are able to recognise the different medications that can slow down

weight loss or exacerbate weight gain, and can calculate and recommend appropriate doses of medications taking into consideration their altered metabolism in overweight or obese individuals. A recent systematic review showed that commonly prescribed medications, including beta-blockers for cardiovascular disease, sulfonylureas for diabetes and the majority of anti-psychotic and anxiolytic medications can all cause weight gain.^[5] The need for community-based weight-management interventions was noted in this study to help decrease weight gain caused by these medications, however, to date there is no appropriate programme or intervention. Currently in community pharmacies and other primary care settings in the USA, UK and Australia there are no weight-management resources specific to women that pharmacists and other health professionals could access and use to help guide and support women during their weight loss or maintenance journey. By providing advice and information to their women consumers, health professionals will also be able to indirectly target the rest of the household, including partners and children.

Therefore, for primary care professionals such as pharmacists to provide evidence-based, up-to-date weight-management advice, educational resources urgently need to be developed. Material available online or for a smartphone application has recently been utilised by a large number of companies and government bodies as well as by healthcare insurance providers to provide readily accessible healthcare information. In the UK, Australia and the USA government bodies have developed websites^[6–8] that deliver weight-management advice, and hence some may argue that the need for a new website is outdated and unnecessary; however, these government websites often lack information about weight-management strategies for specific female-related conditions (pregnancy, post-partum, menopause, polycystic ovary disease etc.), have very little information about trendy diets and can be difficult to navigate if the person is not familiar with the internet. Health topics are often researched online by the general public, but studies have found that people on the whole use general search engines and are unaware of whether the sites they visit provide credible and accurate information.^[9] Lewis *et al.* found that the most commonly visited websites by obese people searching for weight-loss treatments were product based and those advertising commercial weight-loss programmes such as Weight Watchers.^[10] It has also been shown that health information that is obtained online is not discussed with health professionals who then remain unaware of what information is being obtained by the patient and whether or not it is correct.

A recent Australian study showed that people who are obese readily use the internet to obtain information about new weight-loss strategies, with some even searching for a new weight-loss treatment up to twice a day.^[10] The main motivators for searching online were the perceived lack of

healthcare professional support, desperation and wanting information on fashionable diets. This study concluded that the public is in need of a website that is trusted, contains information that is unbiased, offers advice about healthy living, not merely weight loss, has a strong support network that allows the person to feel part of a community, and is free of shame, guilt and failure. With pharmacists being one of the most trusted and highly accessible healthcare professionals, and pharmacies being a prime destination for people to seek weight-loss products or join weight-loss programmes, developing a web resource that can be accessed at home, at work, on a smartphone application and in pharmacies will allow wide distribution and access to a resource that is very much needed. Furthermore, by having a web resource that is accessible in pharmacies, it will enable wide circulation of educational materials available online in other flexible hard copy formats to those individuals who do not have access to the internet. It will also allow pharmacists and pharmacy staff to have readily available evidence-based information about products and programmes that are widely sold in pharmacies but are not appropriately regulated.^[11]

It is apparent that the time has come for the development of an evidence-based, independent, online educational resource on diet, exercise, weight management, medications, programmes and products, which is combined with other flexible formats such as printed resources or phone applications. These resources should be targeted at women in general and

according to different phases in their life, so that women, their partners and families have the information they require to help them manage their weight. Having these resources also available from community pharmacies, where most of the weight management products are available, will enable access to evidence-based information on weight management at the time that product requests are made. This will assist pharmacists and pharmacy support staff to provide individualised, accurate assistance to support women and their families to lose weight, maintain a healthy weight and improve their general wellness. By providing women with this knowledge it will empower them to take better control of their health and wellbeing, and it may be the much needed answer to complement already existing resources to help curb the obesity epidemic.

Declarations

Conflict of interest

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

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