

Role of Pharmacists in Obesity Management

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Abstract

Obesity is defined as an abnormal accumulation of fat (BMI >30kg/m²). It may result in health impairment, and is rising fiercely in developing countries. Chronic conditions, like obesity, can be best managed by a synchronized team of healthcare professionals. Interventions by community pharmacists can be effective in weight management but factors like insufficient access to patient information, time restriction and a poor pharmacist-physician relationship are hindering the provision of this service. It is also believed that pharmacists don't have adequate training for consultation and have a product-focused approach to gain finances. However, pharmacists should be encouraged to reduce obesity prevalence, since obese patients tend to have numerous co-morbidities thus, interact with community pharmacists for OTC and prescription drugs. Also, Pharmacists can assess diseases related to obesity, calculate BMI, perform body fat analysis, reinforce lifestyle modifications, educate patients and start treatment in collaboration with physicians.

Key words: Chronic Disease Management, Clinical Pharmacy, Community Pharmacists, Obesity, Pharmacist-Physician Relationship, Weight Management.

INTRODUCTION

Obesity, which is defined as an abnormal accumulation of fat, (BMI >30 kg/m²), that may result in health impairment, has become a notable contributor to ill health and is superseding long-established public health concerns, like undernutrition.^[1] It is rising fiercely in developing countries, and has reached epidemic levels in the US.^[2] Results from a study by Wang *et al*, conducted in 2012, show that in only 15 years, 80% of the population in the US will be overweight or obese.^[3] Several other factors are being linked to the increasing prevalence of obesity, besides the established ones like diet and physical activity.^[4] The prevalence of obesity is also thought to be associated with using electronic devices for long hours, advertisements of unhealthy food, and genetics.^[5,6] The most recent "obesity villain" that has surfaced is insufficient sleep.^[7] According to a study conducted by Vorona *et al*, restricted sleep is thought to be linked with metabolic and endocrine changes that can result in obesity.^[7] The increasing prevalence of obesity is of great concern, since it can result in many harmful consequences, which may be psychological, health-related, like a high cardiovascular risk and diabetes, and could result in a risk of premature mortality.^[8] A cohort study by Hoffmans MD *et al*, suggests that overweight or obese 18-year-olds had notably higher mortality within 20 years of follow-up.^[9] Obesity has also become a current economic burden in many developed countries.^[10] Individuals with a BMI between 35 and 40 cause twice the increase in health-care expenditures, in comparison with normal weight.^[11]



Moreover, obese individuals are stigmatized and discriminated on the basis of their weight, at 66% prevalence rate in the US, which is comparable to racial discrimination rates.^[12] This is not only common in social and work-place settings, but also at health-care settings, where healthcare professionals view obese individuals as unattractive and assume them to be non-compliant and weak-willed.^[12] This negative attitude from health-care professionals leads to obese individuals forgoing preventive care, like not undergoing age-appropriate screenings for cancer.^[12] All of the above concerns make it highly essential that obesity be prevented and treated.^[12]

Pharmacists' role in chronic disease management:

Chronic diseases can be best managed with the provision of healthcare by a synchronized team of healthcare professionals.^[13] Although a team of healthcare professionals is generally believed to provide high quality care, some are still doubtful about the role of team members other than the doctor.^[13] Pharmacy is a clinical profession, which means that pharmacists provide care, counseling and advice, and are not restricted to dispensing.^[14] Pharmacists are often included in healthcare teams for chronic disease management, due to their clinical and behavioral skills.^[13] They competently perform crucial care elements that a doctor may not have the time or training to perform.^[13] Pharmacists don't only regulate medications and manage populations, but they also do an intensive follow up.^[13] They also play consultative and educational roles.^[13] George PP *et al* state in a literature review, that community pharmacists are involved in the management of conditions like diabetes, hypertension, asthma and many more.^[14] There is evidence that interventions by community pharmacists are effective in preventive services like weight management.^[14] Factors that are hindering community pharmacists from effectively contributing in chronic disease management are insufficient access to patient information, time restriction and a poor relationship between pharmacists and physicians.^[14] Since pharmacists are easily accessible and comparatively affordable, they are normally the first point of contact for minor ailments and other healthcare needs.^[14] Pharmacists provide pharmacological advice on chronic disease management.^[14] In certain hospitals, high risk patients' hospital discharge medication is faxed to pharmacists and they do home visits and in collaboration with the doctor, produce and monitor a care plan.^[14] They also manage medications in residential aged care settings.^[14] Pharmacists actively promote the rational use of medicines, health education, detection of diseases, and provide and do surveillance of medications, while giving important information to other healthcare professionals.^[14] In order to

optimize therapy in chronic diseases, pharmacists provide services like medication reconciliation.^[14]

Obesity and pharmacists' role:

The role of pharmacists has now redirected from traditional dispensers of medicines to a more patient centered approach.^[15] Obesity comes with numerous co-morbidities, due to which obese patients tend to interact with community pharmacists for both OTC and prescription drugs.^[16] The American Society of Health System Pharmacists encourages pharmacists to reinforce lifestyle modifications in patients while educating them about obesity management.^[16] A pharmacist can greatly contribute in an obese patient's weight management by monitoring patient medication profiles to recognize prescribed drugs that are likely to increase weight.^[17] Community pharmacists get to interact with more obese individuals in their work place compared to all other sectors, and can psychologically support these individuals, follow-up with them and give them feedback, all of which is highly essential for effective weight management.^[18] Pharmacists can facilitate weight loss by assessing diseases related to obesity, calculating BMI, performing body fat analysis and collaborating with other healthcare professionals to start treatment and reassess goals.^[19] Although physicians are likely to believe that obesity is patient's fault, findings show that pharmacists do not permit personal biases to hamper counseling.^[16] The Government of UK has acknowledged the role of pharmacists in managing obesity in the 2008 White Paper Pharmacy in England.^[15] According to a study in Denmark, slimming courses at 19 pharmacies, in 1999, resulted in a weight loss of more than 5 kg in 20% of patients that took the course upon a follow-up after a year.^[15] A mean weight loss of 3.6 kg has been reported when pharmacists consulted obese individuals, in a weight management service provided on a college campus in the US.^[15]

However, pharmacists' role in obesity management is criticized, since it is believed that they don't have adequate training for consultation and have a product-focused approach to gain finances.^[15] O'Donnell *et al* reported that pharmacists face barriers when trying to counsel obese patients, like shortage of time and low expectations from the patients.^[16]

CONCLUSION

Obesity is a worldwide pandemic caused by several factors like sedentary lifestyles and unhealthy food habits. To effectively manage the obesity pandemic, healthcare professionals need to guide and counsel obese individuals.

Community pharmacists are a source for weight loss and lifestyle counseling, since they are easily accessible. Pharmacists have a comprehensive knowledge about the etiology, risk factors, prevention, management and treatment of disease states, thus they have a good foundation to counsel patients. Pharmacists are well-trained to perform basic physical assessments, counsel about pharmacotherapy, and upon additional training, can also counsel about diet and physical activity. They can work alongside other healthcare professionals to manage obesity. Barriers to the effective management of obesity by pharmacists can be overcome by making patients more aware about the ability of pharmacists in counseling about obesity. Further researches should be done to better understand the barriers pharmacists are facing in providing consultation about obesity management and integrated healthcare system weight management services should be implemented.

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CONFLICT OF INTEREST

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