Qualitative Research into the Barriers for Effective Patient Self-Management of Comorbid Diabetes, Obesity, and Asthma

ABSTRACT

Objective(s): This qualitative research supported by the Community Pharmacy Foundation addresses the patient self-management disorders of diabetes and comorbid asthma, and the additional impact of obesity. Specific objectives were to gauge the relative level of burden posed by the self-management of these conditions (e.g., effective medication use, exercise, and dietary adherence) and the role of pharmacy in aiding this. Method(s): Adult respondents were recruited across the American West to participate in separate online bulletin board (OBB) discussions for approximately two hours spread over the course of a day, wherein respondents with diabetes only (N=22), the other with patients with both asthma and type 2 diabetes (N=19), or both with obesity (N=30)– representing a mix of ethnicities, geographies, and socio-economic status. All had had prescriptions for asthma or diabetes at a community pharmacy. Result(s): Pharmacists were perceived to play only a limited role in asthma and/or diabetes management beyond dispensing medications; relying on primary care physicians for information and guidance. Information gaps, and management and resulting fear associated with asthma. Procedure: Study protocol and consent forms reviewed and determined to be exempt by the University of Utah IRB. Experienced health researchers from the CRO moderated the discussions. Results: Patients participated in either two-day-long online bulletin boards (OBBs) specific to their asthma and diabetes status – Asthma only, Asthma + Diabetes, or Diabetes only. Patients received an industry standard honorarium. Patients completed approximately 2 hours of online interviewing on the conditions in response to posted questions to the panel, and to individual prompts. Discussion Guide: Discussion topics included current health status, steps taken in managing their condition(s), their own role and the role of health care providers in helping patients maintain weight, and the additional impact of obesity. Specific objectives were to gauge the relative level of burden posed by the self-management of these conditions (e.g., effective medication use, exercise, and dietary adherence) and the role of pharmacy in aiding this.

INTRODUCTION

Diabetes is a chronic condition that affects over 29 million people in the US,1 and is associated with multiple chronic comorbidities, including cardiovascular disease, depression, and respiratory diseases (including asthma and COPD).2–7 Patient self-management, including medication adherence and lifestyle modifications, is essential to achieving desired outcomes. However, diabetes self-management can be complicated by the presence of comorbidities such as obesity and/or depression.4 Research into the effective self-management of multiple comorbidities with diabetes is lacking, including the relationship between diabetes/obesity and asthma.1 In one qualitative research study of African-American women with asthma, asthma management “took a backseat” to the diabetes.8,9 Furthermore, asthma affected exercise tolerance which further impacted the management of their diabetes.10 Our prior research has highlighted the low levels of asthma medication adherence in the community pharmacy setting.3

METHODS

Sample: Convenience sample of patients with asthma (N=22) or asthma and comorbid type 2 diabetes (N=19) who had taken medication for their condition(s) within the past year (filled at a community pharmacy setting).11–13

• Cohort included a mix by gender, age, race, ethnicity, employment status, annual household income and asthma and/or diabetes status (N=56). Both groups were predominantly patients with obesity (BMI>30): representing a mix of ethnicities, geographics, and socioeconomic status. All had had prescriptions for asthma or diabetes at a community pharmacy.

• Includes a subset of obese participants with BMI above 30 kg/m²

• Patients recruited by a contract research organization (CRO), Marketing and Planning Systems/Kantar.

Procedure: Study protocol and consent forms reviewed and determined to be exempt by the University of Utah IRB. Experienced health researchers from the CRO moderated the discussions. Patients participated in either two-day-long online bulletin boards (OBBs) specific to their asthma and diabetes status – Asthma only, Asthma + Diabetes, or Diabetes only. Patients received an industry standard honorarium. Patients completed approximately 2 hours of online interviewing on the conditions in response to posted questions to the panel, and to individual prompts.

Discussion Guide: Discussion topics included current health status, steps taken in managing their condition(s), their own role and the role of health care providers in helping patients maintain weight, and the additional impact of obesity. Specific objectives were to gauge the relative level of burden posed by the self-management of these conditions (e.g., effective medication use, exercise, and dietary adherence) and the role of pharmacy in aiding this.2

RESULTS

Pharmacists’ Role: Patients acknowledged that pharmacists currently play a limited role in asthma and/or diabetes management beyond dispensing medications.

• Those who were satisfied with this experience and trust their pharmacist to prepare their medications properly, timely and answer any questions they may have.

• Only a few demonstrated recommendations or demonstrations from their pharmacist.

• Physicians reliance may be one of the reasons they don’t look to pharmacists as a resource.

“I have not spoken to the pharmacist because of the information I receive from my doctors. If I had questions, I would definitely ask.”

“The doctor didn’t say anything about managing both asthma and diabetes and I don’t think they had any information regarding having both conditions together.”

CONCLUSIONS

This study provides insight into the functional and emotional burdens of asthma and comorbid asthma, diabetes, and obesity. Pharmacists acknowledged the importance of their own self-management of these conditions and this research suggests some areas in which community pharmacies could play a more proactive and expanded role in mitigating this burden and facilitating self-management.

REFERENCES


