Understanding COPD Patients' Values in Regards to Educational Modalities Offered at a Local Pulmonology Clinic

Nathaniel Baker
USF MCOM- LVHN, Nathaniel.Baker@lvhn.org

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Understanding COPD Patients' Values in Regards to Educational Modalities Offered at a Local Pulmonology Clinic

Nathaniel Baker Mentor: Dr. Robert Kruklitis

Lehigh Valley Health Network, Allentown, Pennsylvania

Background

Chronic Obstructive Pulmonary Disease (COPD) is one of the greatest health problems facing Americans today with a total cost of $50 billion and over 700,000 hospital discharges annually[1]. COPD is also the 3rd leading cause of death in the United States and an incurable disease which causes acute exacerbations and an overall decline in lung function and quality of life over time[2]. However, several self-directed patient interventions have been shown to improve quality of life, reduce disease symptoms and reduce hospital admissions[3]. One of the barriers to such interventions, however, is a prevalent lack of understanding of the disease and its treatments among COPD patients[4-7]. Several surveys and interviews have shown COPD patients have a subjective and objective lack of knowledge of COPD itself as well as specifics such as medication management and how to recognize and respond to exacerbations[4-7]. Surveyed patients stated they believed their lack of understanding made it less likely for them to make attempts at self-directed interventions[4,7]. Patients also felt that medical practitioners gave them little information to help rectify those gaps in knowledge[4,6,7].

Part of the problem medical practitioners may face is a lack of adequate time to provide education; however, one survey showed only 43% of pulmonologists consider themselves very knowledgeable in teaching patients how to use inhaler devices[8,] and another survey showed many felt they were not experts in advising patients on breathing exercises or following a proper diet[9]. A survey of nurses and allied health personnel showed most felt they did not have the time or insight into training needs to provide adequate support for patients' attempts at improving self-management[10]. One potential solution to these problems is to provide standardized education to patients such as one Pulmonology office has been doing in Allentown, PA by offering Group Medical Visits (GMVs) to COPD patients (R. Kruklitis, personal communication, December 12, 2017). GMVs have been effective in treating patients with type 2 diabetes[11,12]; however, the pulmonology office has had trouble enrolling a large number of patients into GMVs.

Problem Statement

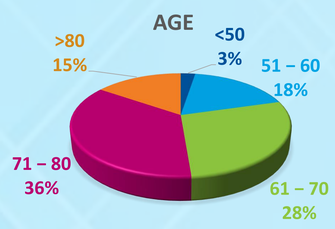
In an effort to understand the potential reasons for the relative lack of interest from patients in attending GMVs and explore the feasibility of other potential efforts to engage patients in COPD education at a local pulmonology office, a survey was developed and disseminated to COPD patients during office visits.

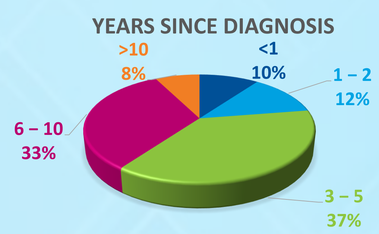
Methods

This project was determined to be a quality improvement project by the project mentor and was therefore not reviewed by the IRB. The survey was developed by the author of this paper with the input of the Pulmonologist who started the GMVs in the previously mentioned pulmonology office, a local Emergency Room Physician who specializes in evidence-based medicine and a representative from the Department of Education at the same institution. The survey went through six iterations before being approved by all parties. The survey was generated using Qualtrics software[13]. The survey was not piloted before data gathering, and did not use any validated questions. The survey was offered to all COPD patients over a 4-week period by a medical assistant after vital signs were taken and before seeing a provider during an office visit. The surveys were available on 2 different tablet devices borrowed from the Department of Education which immediately uploaded the results of the survey to the Qualtrics website. The medical assistants ensured the survey was loaded on the device before handing it to the patient. The survey was anonymous and incomplete surveys were counted. The plan for data analysis was to look at the raw data and then look at subgroups to see if age, time since diagnosis or interest in different educational options affected the likelihood of interest in each of the three education modalities discussed.

Results

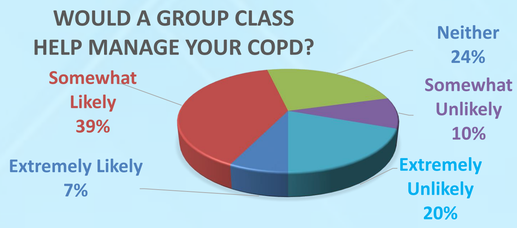
The survey was offered to 44 patients and 41 (93%) patients completed at least a portion of the survey. 80% of respondents were over the age of 60 and 51% were over the age of 70. Only 1 (2%) respondent was under the age of 50. Of those who responded, 22.5% had been diagnosed with COPD within the past 2 years and 40% had been diagnosed with COPD at least 6 years ago[13].



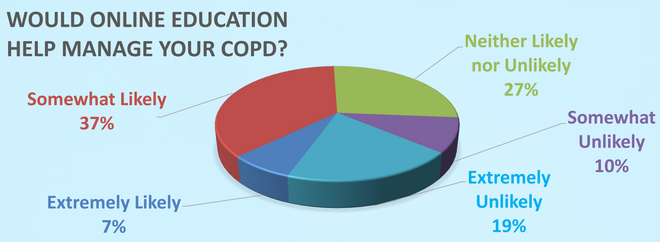


77% of patients indicated they do not currently smoke, 15% said they did smoke and 17% declined to answer. 17% of respondents had already attended a group class, 19% had previously used online education and 41% indicated they have used printed handouts or booklets[13].

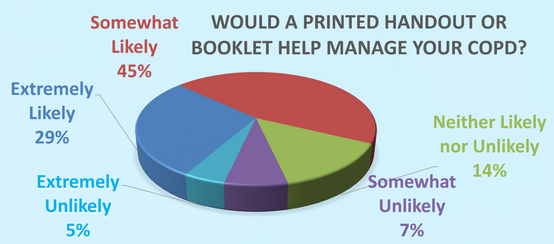
46% of respondents believed a group class would either be extremely or somewhat likely to help them manage their COPD, but when asked which days or times would work best to attend a group class, 75% of patients indicated they did not have interest in attending a group class and no more than 2 indicated any given date or time would work best for them to attend. Patients between 50 and 59 years old and over 80 years old were the most likely to not be interested in a group class with 100% of patients responding as such in each group. All 9 of those who had been diagnosed with COPD within the last 2 years indicated they are not interested in attending a group class[13].



When asked about online education, 44% believed online education would be extremely or somewhat likely to help them manage their COPD. When asked how long they would watch online education, 41% stated they were not interested in online education. Of those who responded to one of the lengths offered, 78% said they would watch online education for 10 minutes or longer. Of the 16 who were not interested in online education, 14 (88%) were also not interested in group medical visits. 49% of those who were not interested in group education were also not interested in online education. 50% of those under the age of 60 and 58% of those over 70 indicated they were not interested in online education while only 9% of those between 60 and 69 were not interested[13].



74% of patients believed a printed handout or booklet would either be extremely or somewhat likely to help them manage their COPD while 12% of patients believed such an intervention would either be somewhat or extremely unlikely to provide a benefit. Of the patients who thought a printed handout or booklet was unlikely to help them manage their COPD, all 5 stated they were not interested in a group class, but only 2 (40%) said they were not interested in online education[13].



Discussion

Only 25% of surveyed patients had any interest in group classes and those who did have interest wanted a wide variety of dates and times to attend the class. To this date, GMVs have only been offered on Fridays (V. Siegfried, personal communication, February 18, 2019), so more interest could potentially be garnered if different days of the week were offered. There is a large disparity in those who believe group classes would likely help them manage their disease (46%) and those who expressed interest in attending a group class (25%). This discrepancy was surprising as attending a group class seems as though it would be a relatively small price to pay to improve COPD symptoms. It is possible that more people could be convinced to attend GMVs with the use of motivational interviewing which has been shown to be effective in changing a variety of behaviors in the short term by several systematic reviews[14-18]. Only 41% of patients had no interest in online education and 51% of those who were not interested in group education expressed some interest in online education[13]. Interest in online education did not change significantly based on age or time since diagnosis. 74% of patients thought printed handouts or booklets would likely help them manage their COPD, but only 41% said they have received printed handouts or booklets. Offering all patients a greater variety printed handouts or booklets could not only potentially help with patient education, but could improve patient satisfaction as one previous study of COPD patients has shown[19].

Project Relationship to SELECT Principles: This study was a good example of Values Based Patient Centered Care. The initial approach used in regards to patient education was provider based as the solution was offered before adequate understanding of patient desires was achieved. Now that this survey has been completed, this office can have a better understanding of the values of their COPD patients, so future educational opportunities can be more patient centered.

Conclusions

The data from this survey explains why more patients have not attended GMVs at this office. This discrepancy in those who believe a group class could help them manage their COPD and those interested in attending a group class would likely require buy in and motivational interviewing from providers to correct. Online education seems to be a viable alternative to GMVs and could be offered to all COPD patients, regardless of age. Offering all patients a greater variety printed handouts or booklets could not only potentially help with patient education, but could improve patient satisfaction. Based on the data gathered, offering GMVs, online education and written educational materials to all patients would likely allow the office to provide desired educational materials to a vast majority of patients as only 2 (5%) patients did not believe any of the materials discussed could help them with their disease and showed no interest in group classes or online education. The Department of Education at this institution has already purchased the rights to use many online and printed educational materials which patients can access for no additional charge (B. Shaffer, personal communication, 1/25/2019).The office should coordinate with the Department of Education to ensure they are aware of all educational materials available and then ensure all providers are aware of which materials they can offer to patients.

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