IMPACT ON QUALITY OF LIFE IN GERD PATIENTS USING GERD IMPACT SCALE

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ABSTRACT

Background: Gastro-esophageal reflux disease is a chronic gastrointestinal condition characterized by heartburn and regurgitation caused by the reflux of gastric contents. It is a motility disorder primarily due to the transient relaxations of the lower esophageal sphincter.

Material & Methods: This observational study was conducted at medical outpatient department, Civil Hospital Karachi, from April 2, 2012 to October 1, 2012. Age >18 year, with symptoms of heartburn and regurgitation of 6 weeks to 6 months and having no history of medications for these symptoms were invited in study from OPD. Exclusion criteria were patient already taking proton pump inhibitors, gastro-intestinal malignancy and patients with known ischemic heart disease.

Results: Among 217 cases, 118(54.4%) were males and 99(45.6%) females, with male to female ratio of 1.2: 1. Quality of life of patients with gastro-esophageal reflux was measured by using urdu version of GERD impact scale. Poor quality of life (score ≤ 2) was found in 103(47.5%) cases. Overall mean impact score on quality of life was 2.3±0.60 in GERD patients. Majority of males 63(53.4%) were experiencing poor quality of life as compared to females 40(40.4%). Patients of age ≤ 20 years experienced worse quality of life 37(48.7%) as compare to cases of age 21-40 years 66(47.1%).

Conclusion: GERD Impact Scale can help PCPs to identify treatment needs in patients with a new GERD diagnosis, as well as identifying patients with a chronic GERD diagnosis who need more effective treatment.

KEY WORDS: Gastroesophageal reflux disease; GERD; Gastroesophageal reflux; Quality of life.

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INTRODUCTION

Gastro esophageal reflux disease (GERD) is a chronic gastrointestinal state characterized by heartburn and regurgitation caused by the reflux of gastric contents. GERD is a motility disorder due to the transient relaxations of the lower esophageal sphincter. Persons with heartburn or regurgitation often present with additional symptoms allied with GERD i-e non cardiac chest pain, dysphagia, dyspepsia, and globus sensation.1-3 The severity of disease, however, is attributable to the level and duration of acid exposure in the esophagus. Almost seventy percent of patients with chronic hoarseness and more than eighty percent of patients with asthma have symptoms that may be associated.^{2,4} Its severity has been associated with obesity and development of Barrett's change.5-7

Corresponding author: Dr. Faisal Moin Senior Registrar,Department of Medicine Dr. Ziauddin Hospital, Karachi, Pakistan E-mail: drfaisalmoin79@gmail.com GERD is a widespread chronic disorder, affecting up to sixty percent of persons at some time during the course of a year and twenty to thirty percent of persons at least weekly.⁸⁻⁹ Frequent or severe symptoms of gastro esophageal reflux disease are allied with time lost from work, impaired health-related quality of life, and esophageal adenocarcinoma, further emphasizing the clinical significance of this entity.^{10,11}

According to a European study, the recurrence of GERD symptoms was reported to be 52% in Germany, 42% in Greece, 33.5% in Norway and 30.5% in UK. 12

It has been noted that physicians underestimate the impact of GERD on the patient's quality of life.¹³ The GERD Impact Scale (IS) can help a physician to choose the suitable treatment for each patient, based on the occurrence and brunt of the relevant symptoms.¹⁴ It helps to get information about up to what extent GERD disrupts patient's sleep, work, physical activity and social occasion. This tool has been barely used by our local physicians despite of high validity of the scale. An Urdu version of GERD Impact Scale was used in this study to standardize data collection as a supplementary file.

This study was designed to determine whether the GERD Impact Scale can assist a physician to decide the proper treatment for each patient, based on the occurrence and brunt of the relevant symptoms.

MATERIAL AND METHODS

This study was conducted at medical outpatient department, Civil Hospital Karachi, from April 2, 2012 to October 1, 2012. Patient's age >18 year present with symptoms of heartburn and regurgitation for 6 weeks to 6 months and having no history of received medications for these symptoms were invited in study from OPD. Those who were willing to participate were included in this study after taking informed consent. Questionnaire was filled by the researcher himself. Final outcome in term of quality of life was measured in average GIS score of GERD patient. Demographic data of the patients including age, gender, and duration of GERD were modifiable risk factors. Inclusive criteria patients were GERD with 18-40 years of age, duration of six week to six month of GERD symptoms and either gender. Exclusion criteria were, patient already taking proton pump inhibitors, gastro intestinal malignancy and patient with known ischemic heart disease.

RESULTS

A total of 217 patients with GERD of 18-40 years attending the medical OPD were studied. Of these, 118 (54.4%) were males and 99 (45.6%) females with male to female ratio was 1.2: 1. Majority 140 (64.5%) of cases had age between 21-40 years, Mean (\pm SD) age of GERD cases was 31.3 \pm 6.9 years. (Fig. 1)

Duration of GERD in 114 (52.5%) of cases was > 3 months, Mean duration of GERD was 3.3±1.9 months. Quality of life of patients with GERD was



Figure 1: Age distribution of patients (n=217).



Figure 2: Impact on Quality of Life on mean scores of GERD Impact Scale. (n=217).

measured by using Urdu version of GERD Impact Scale. Poor quality of life (GERD score \leq 2) were found in 103 (47.5%) cases. Overall mean impact score on quality of life was 2.3±0.60 in GERD patients. Majority of males 63 (53.4%) were experiencing poor QoL as compared to females 40 (40.4%). Patients of age \leq 20 years experienced worse QoL 37 (48.7%) as compared to cases of age 21-40 years 66 (47.1%). (Table 1 & Fig. 2)

DISCUSSION

GERD which is painful chronic disease left significant impact on daily lives of people affected and studies on this disease have shown that the patients with this disease are unable to perform their normal physical activities for example disruption in social life, sleep and productivity of work ^{15,16} while

Patients	Impact on Quality of Life		P-value
	Poor	Better	
118	63 (53.4%)	55 (46.6%)	<0.001
99	40 (40.4%)	59 (59.6%)	
77	37 (48.1%)	40 (51.9%)	0.002
140	66 (47.1%)	74 (52.9%)	
103	45 (43.7%)	58 (56.3%)	0.001
114	58 (50.9%)	56 (49.1%)	
	118 99 77 140 103	Poor 118 63 (53.4%) 99 40 (40.4%) 77 37 (48.1%) 140 66 (47.1%) 103 45 (43.7%)	Poor Better 118 63 (53.4%) 55 (46.6%) 99 40 (40.4%) 59 (59.6%) 77 37 (48.1%) 40 (51.9%) 140 66 (47.1%) 74 (52.9%) 103 45 (43.7%) 58 (56.3%)

Table 1: Impact on Quality of Life with respect to gender, age groups and duration of disease (n=217).

negative effects of GERD may be mild to moderate and even severe which depends on regularity and rigorousness of symptoms, not on the existence of esophageal.^{17,18} Additionally, the effect on the life of patients GERD is comparable with back pain and asthma ¹⁶

The affect of symptoms on daily basis is the major reasons for consultation in diseases of the digestive system, besides concerns about serious diseases and dissatisfaction with treatment ¹⁹. Primary care physicians in the face of necessity soon as the patient is at risk understood due the rigorousness and impact of symptoms while in the initial session with the patient, the diagnosis of gastroesophageal reflux disease, it should be assessed by the physicians that patient will benefit from effective treatment if he/she can be sure that the symptoms may resolve instinctively. All those patients with an existing diagnosis should evaluate the usefulness of management strategies, and whether the treatment should be approached in further effective treatment / higher dose, or he / she may be enhanced.

Although the combination of symptoms and endoscopy scores has proven diagnosis of said disease (GERD) with elevated specificity²⁰, it is very much established that the management of GERD in primary care can be best dealt with on the basis of the report of the patient's symptoms. It is known, however, ill patient symptoms communicates in a wide range of diseases. Thus, the reported agreement between patients and physicians about the presence and severity of symptoms is at best mediocre in many disciplines of gastroenterology or oncology and virology.²¹

This study developed and tested a simple, one-page, patient-completed tool to communicate to the doctor the effect on patients' lives. In this study quality of life of patients with gastro esophageal reflux disease measured by using urdu version of GERD impact scale. Poor quality of life (GERD score ≤ 2) was found in 103 (47.5%) cases. Overall mean impact score on quality of life was 2.3 ±0.60 in GERD patients.

Findings of this study correlated positively with already published data concerning the impact of symptoms of GERD on the daily lives of patients in European countries.^{22,23} It is now predominantly obvious that impairment of HRQOL is correlated with patient-perceived severity and frequency of GERD symptoms, and that episode of mild but upsetting GERD symptoms at least once a week is a practical signal of underlying GERD.^{22,23} Night-time symptoms are common in patients with GERD.¹²

Another study reported the mean total GERD Impact Scale was 2.2 ± 0.6 and 2.3 ± 0.7 for upper gastrointestinal symptoms and 2.1 ± 0.7 for other

acid-related gastrointestinal symptoms.24

In conclusion, GERD Impact of scale has many advantages. Firstly, with large efforts of both patients and doctors, which means that effects of the symptoms of GERD reflux scale and focusing effects are more similar to those groups. Secondly, it has excellent psychometric properties in patients with GERD, and elements, such as heartburn and are highly correlated; users can be sure, therefore, that accurate measurement of the impact of GERD on a consistent, repeatable and flexible manner. Thirdly, it is small, which makes it quick and easy to make, and the patient for the physician to review. Therefore, physicians who score a useful tool for clinical decisions. He helped lead the decision of primary care physicians in recently diagnosed patients and helped in the identification of patients with conventional diagnosis will benefit from diverse treatment. Overweight of the patients is also a cause of GERD. In order to control GERD, patients of this disease must have a plan for their weight loss for which balance diet and exercise very important. There are certain foods which enhance GERD so removal of such foods from the diet of patients of said disease will be helpful for the patients. One of the easy controls of the GERD is to divide the meal times into six times instead of three big meals it will help in reducing the pressure on stomach which will ultimately minimize heartburn.

CONCLUSION

In summary, impact of GERD scale showed good psychometric properties and has proved useful for the majority of the participating primary care physicians. Highlighting the brunt of reflux symptoms on the lives of patients, GERD scale effects may help primary care physicians to identify the needs of the therapy in patients with newly diagnosed GERD and identification of patients with a diagnosis of GERD, the chronic need for more effective treatment.

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CONFLICT OF INTEREST Authors declare no conflict of interest. GRANT SUPPORT AND FINANCIAL DISCLOSURE None declared.