



CODEN [USA]: IAJ PBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF  
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.1480868>Available online at: <http://www.iajps.com>

Research Article

**PUBLIC AWARENESS TOWARDS GERD AMONG SAUDI  
POPULATION IN AL-DAMMAM CITY, SAUDI ARABIA**

Ali Mohammed Alsaihati<sup>1</sup>, Bader Essa ALmasoud<sup>2</sup>, Salma Taher Al Omran<sup>3</sup>, Amkalthom Hussian Almohammed Ali<sup>4</sup>, Abdullah Saleh Alsulaim<sup>5</sup>, Ghasham Salem Almarzoqi<sup>6</sup>, Mohammed Sameer AlAbbad<sup>7</sup>, Bashayer Ibrahim AlKhalifah<sup>8</sup>, Morabet Fahad Al Hemaïd<sup>9</sup>, Mohammed Shabeeb M Alhagbani<sup>10</sup>, Mohammed Nasser A Al hajjaj<sup>10</sup>, Munirah Abdullah Almakhayitah<sup>11</sup>

<sup>1</sup>Qatif Central Hospital, <sup>2</sup>Faisaliah PHC Dammam, <sup>3</sup>Imam Abdulrahman Bin Faisal university, <sup>4</sup>Almaarefa University, <sup>5</sup>King Saud University, <sup>6</sup>Taif University, <sup>7</sup>Aljafer hospital, <sup>8</sup>King Faisal University, <sup>9</sup>Al Imam Mohammad Ibn Saud Islamic University, <sup>10</sup>Arabian gulf university, <sup>11</sup>King Faisal University

**Abstract:**

**Background:** Gastro-esophageal reflux disease [GERD] known as one of the most common gastrointestinal disorders visit clinics and ER. Also, it affects patient's lifestyle negatively. There are many doctors confuse this disease with heart diseases such as angina.

**Objective:** To assess the level of awareness toward GERD signs, symptoms, risk factors and methods of treatment among Saudi population in Al-Dammam City. **Methods:** A cross-sectional study based on questionnaire that was distributed among the general public in Al-Dammam City, Saudi Arabia. The questionnaire consist of two sections: first was included social-demographic information and the second section was to assess the level of awareness and knowledge about the most common symptoms and risk factors related to GERD. **Results:** In this study, 250 participants were filled the surveys. Male participants were more than females [54% and 46% respectively]. More than third of the participants aged between 20 and 30 years. The most common source to obtain information among participants was relatives [66%]. most of participants know that heart burn, regurgitation and chest pain are the most common symptoms GERD patients have with [84%, 77%, 62%] respectively. most of participants chose smoking and alcohol consume as the most common risk factors for GERD [87.2%] and [86%] respectively. The vast majority of participants [82%] believe that lifestyle modification can treat GERD and [86%] of participants do not believe that surgical treatment is a method to treat GERD. **Conclusion:** participants show good knowledge and they have acceptable awareness towards the symptoms and risk factors of GERD and most of them obtained their knowledge from their relatives thus We recommend providing health information concerning GERD on the Internet and to increase the health campaigns to increase the level of awareness among general population.

**Keywords:** Gastro-esophageal reflux disease, Risk factors, Knowledge, Awareness.

**Corresponding author:**

Ali Mohammed Alsaihati  
Qatif Central Hospita

QR code



Please cite this article in press Ali Mohammed Alsaihati et al., *Public Awareness towards Gerd among Saudi Population in Al-Dammam City, Saudi Arabia.*, Indo Am. J. P. Sci, 2018; 05(11).

**INTRODUCTION:**

Gastro-esophageal reflux disease [GERD] is one of the most common chronic disorders related to digestive system which it results from lower esophageal sphincter dysfunction which leads to reflux the content of stomach back to esophagus [1]. The prevalence of GERD was reported to be high 20% in Western world [2].

Esophageal reflux diseases may present with various of symptoms such as burning sensation and pain in retrosternal area. Esophageal reflux disease symptoms included heartburn, regurgitation and chest pain. The main point for making the diagnosis is clinical history of esophageal symptoms and exclusion. There are many important details should be obtained by taking proper history to exclude other diseases especially lethal diseases such as malignancy. Questions to exclude malignance including weight loss, gastrointestinal bleeding, smoking and alcohol consumption [3].

Patients seek to medical advice because of heartburn and regurgitation and asking for diagnostic evaluation and treatment. Studies showed that GERD may significantly reduce the quality of life and lead to serious complications, such as gastrointestinal bleeding, Barrett's esophagus and ended with malignancy [4].

There are many risk factors such as lifestyle [alcohol consumption, smoking, NSAIDs using] and dietary factors could be predispose to GRED, however the exact etiology is still unknown [5,6].

Obtaining proper history is important to evaluate and diagnosis esophageal reflux disease. Most of patients with GERD can recognize the symptoms of the disease easily and seek medical help. The aim of

this study was to evaluate the knowledge and the level of awareness toward GERD symptoms, risk factors and methods of treatment among general population in Al-Dammam city, Saudi Arabia.

**METHODS:****Study design**

A cross-sectional study based on questionnaire that was distributed on 250 participants randomly in Al-Dammam city. Including criteria was any Saudi citizens, age 20 years old and above.

**Research tool**

The questionnaire included two sections; first section is demographics information including [age, gender, marital status, history of GERD, and sources of information]. The second part was to assess the level of awareness towards GERD symptoms, risk factors and methods of treatment.

**Statistical analysis**

Data entering and analysis was carried out using SPSS version 22.

**RESULTS:**

In this study, 250 participants were filled the surveys. Male participants were more than females [54% and 46% respectively]. The majority of participants are married [87.2%] and only [12.8%] are single. More than third of the participants were aged 20-30 years old and participants who aged between 31-40 years old were [31%]. Regarding the history of GERD among participants, the majority of participants had history of GERD [76.8%]. The most common source to obtain information among participants were relatives [66%], internet [19.6%] and only [14.4%] obtain from books and health campaigns. [Table 1].

**Table [1]: Socio-demographic information of the participants [250]:**

|                        |                          | N [Total =250] | %     |
|------------------------|--------------------------|----------------|-------|
| sex                    | Male                     | 135            | 54%   |
|                        | female                   | 115            | 46%   |
| Marital status         | Single                   | 32             | 12.8% |
|                        | Married                  | 218            | 87.2% |
| age                    | 20-30                    | 94             | 37.6% |
|                        | 31-40                    | 78             | 31.2% |
|                        | 41-50                    | 52             | 20.8% |
|                        | More than 50             | 26             | 10.4% |
| History of GERD        | No                       | 192            | 76.8% |
|                        | Yes                      | 58             | 23.2% |
| Sources of information | relatives                | 165            | 66%   |
|                        | internet                 | 49             | 19.6% |
|                        | Books & Health campaigns | 36             | 14.4% |

The second table illustrates the level of awareness towards GERD symptoms, risk factors and methods of treatment among general population, most of participants know that heart burn, regurgitation and chest pain are the most common symptoms in GERD patients with [84% , 77%, 62%] respectively. In addition, about half of the participants know that globus sensation, dysphagia and odynophagia are symptoms of GERD. Regarding risk factors, most of participants chose smoking and alcohol consume as the most common risk factors for GERD [87.2%] and [86%]

respectively. The majority of participants know that obesity is risk factor of developing GERD [79.6%]. Regarding the methods of treatment, [82%] of participants believe that lifestyle modification is effective methods to treat the GERD. About two-third of participants believe that GERD could be treated medically while only [13.6%] believe that this diseases could be treated surgically.

[Table 2].

**Table 2:** shows the questions regarding the symptoms, risk factors and methods of treatment [N=250]:

| Questions              | N          | %          |
|------------------------|------------|------------|
| Symptoms:              |            |            |
| Heartburn              | 210        | 84%        |
| Regurgitation          | 193        | 77.2%      |
| Chest pain             | 155        | 62%        |
| Globus Sensation       | 133        | 53.2%      |
| Dysphagia              | 130        | 52%        |
| Odynophagia            | 124        | 49.6%      |
| Risk factors:          |            |            |
| Smoking                | 218        | 87.2%      |
| Alcohol                | 215        | 86%        |
| Obesity                | 199        | 79.6%      |
| Pregnancy              | 127        | 50.8%      |
| Methods of treatment:  | True       | False      |
| Lifestyle modification | 205 [82%]  | 45[18%]    |
| Medication             | 158[63.2%] | 92[36.8%]  |
| surgery                | 34[13.6%]  | 216[86.4%] |

### DISCUSSION:

GERD is one of the most common disorder that affect digestive system. General population showed good knowledge towards GERD. Having good knowledge about GERD's symptoms, risk factors and methods of treatment is very important have good quality of life and to prevent its complications. There are few studies evaluated patient knowledge and level of awareness toward GERD. **There is one study** conducted to assess the degree of knowledge in Korean patients with GERD showed most identified GERD manifestations were heart burn [84%], regurgitation [77.2%], and chest pain [62%] [7]. another study, which was conducted among medical students, the participant's information about GERD was derived mostly from the books and internet [71% and 17% respectively] or health campaigns [10.4%][8]. The main symptoms of GERD included heartburn, regurgitation, chest pain [3]. In the current study the most identified GERD manifestations were

heart burn [84%], regurgitation [77.2%], and chest pain [62%]. The manifestations that were less identified included globus sensation, dysphagia and odynophagia [53.2%, 52% and 49.6 % respectively]. **Du Jeong *et al.* [7]** also found that the two most typical symptoms of gastro- oesophageal reflux disease are heartburn and regurgitation. Heartburn is characterized by a painful retrosternal burning sensation. [7]. Risk factors of GERD included: alcohol, smoking, , obesity and pregnancy, [9,10]. In the current study, the most recognized risk factors of GERD were smoking [87.2%], alcohol [86%], obesity [76.9%] and pregnancy [55.8%]. These results indicated that the participants had a relatively good knowledge of the risk factors. However, more educational programs would be expected to decrease the rates and severity of GERD, particularly as many of the risk factors are preventable. In the current study sex, material status had no effect on level of awareness.

**CONCLUSION:**

Some symptoms [globus sensation, dysphagia and odynophagia] and risk factor [pregnancy] for GERD remained unknown to nearly half the participants. Educational programs for GERD should focus on these points.

**REFERENCES:**

1. Vakil N, van Zanten SV, Kahrilas P, Dent J and Jones R [2006]: The Montreal definition and classification of gastroesophageal reflux disease: a global evidence-based consensus. *Am.J. Gastroenterol.*,101[8]: 1900-1920.
2. Kahrilas P and Hirano I [2015]: Diseases of the Esophagus. *Harrison's<sup>TM</sup> Principles of Internal Medicine*, 19th ed. McGraw-Hill Education ,London.
3. Dent J, El-Serag HB, Wallander MA and Johansson S [2005]: Epidemiology of gastro-oesophageal reflux disease: a systematic review. *Gut*, 54[5]: 710-7.
4. Mayer EA and Gebhart GF [1994]: Basic and clinical aspects of visceral hyperalgesia. *Gastroenterology*, 107[1]: 271-293.
5. Jarosz M , Taraszewska A [2014]: Risk factors for gastroesophageal reflux disease: the role of diet. *Prz Gastroenterol.*, 9[5]: 297-301.
6. Nocon M,Labenz J and Willich SN [2006]: Lifestyle factors and symptoms of gastro-oesophageal reflux -- a population-based study. *Aliment. Pharmacol Ther.*, 23[1]: 169-174.
7. Du Jeong I, Park M I, Kim S E, Kim B J, Kim SW, Kim JH, Sung H Y, Oh TH. and Kim Y S [2017]: The Degree of Disease Knowledge in Patients with Gastroesophageal Reflux disease: A multi-center Prospective Study in Korea. *Journal of neurogastroenterology and motility*, 23 [3]: 385-390.
8. Urnes J, Petersen H and Farup P G [2008]: Disease knowledge after an educational program in patients with GERD – a randomized controlled trial. *BMC. Health Services Research*, 8[1]: 236-242.
9. Rabiee B, Motamed N, Hosseini V, Hemasi GR, Maadi M and Zamani F [2016]: Gastro esophageal reflux disease [GERD] prevalence and related risk factors in north of Iran. *Esophagus*,13[4]: 330-336.
10. Lal S K, Austell G A, Zieve D and Ogilvie I [2017]: Gastroesophageal reflux disease [Online]. *Medline Plus, NIH National Library of Medicine*. Available: <https://medlineplus.gov/e/article/000265.htm>. [Accessed May 28,2017/2017].