Dyspnea is more prevalent in aging persons. It is more common, and often more severe in the last few weeks before death. Despite dyspnea being a highly prevalent symptom in older adults and increases more frequent with age regardless of the type of illness or community which patients live in, research indicates that dyspnea is inadequately assessed at the end of life. It can be noticed that a valuable considerable number of elder people come to ER with dyspnea but investigations reveal no relevant organic disease. Studying their social life might bring information which helps to understand the reasons.

The aim of the study: To characterize patients suffering from dyspnea that need social care rather than medical care (with special attention to patients living alone) and to evaluate whether there is a relationship between dyspnea and loneliness living alone in elder people.

Methods: Every patient ≥60 years that presented to ER or clinic with dyspnea and was seen by the author was included to the study. The whole group was divided according to age (from 60 to <70, from 70 to <80, ≥80 years old), gender, education level, and marital status. Data on frequency of attacks and living circumstances were also collected. To exclude organic causes of dyspnea, patients underwent clinical examination, laboratory investigations, and radiological examination. Patients were divided into subgroups according to mode of successful treatment: medical care including drugs and/or manoeuvres and social care.

Results: First aim of the study was to characterize which patients suffering from dyspnea need social care rather than medical care. Social care is a successful way of treatment for patients who live alone, complain of dyspnea frequently, are older and are less educated. As for the diseases, patients with chronic heart disease or chronic diseases other than chest and heart are more likely to profit from social care. However, the most important aspect of the research is the relationship between living alone and dyspnea, especially its frequency and effective treatment. Patients living alone suffered from frequent attacks of dyspnea in 81.7% (364/445) compared to 33.6% (80/238) of patients living with someone. 90.3% (402/445) patients who lived alone were...
successfully treated with social care and sedatives.

Conclusions: Every patient aged more than 60 years who comes to ER with dyspnea with/without suffocation must undergo investigations to exclude organic causes of dyspnea. However, we should pay special attention to patients that will possibly benefit more from social care rather than medical care.

INTRODUCTION

Dyspnea is a multifactoral experience with multiple layers of meaning, including medical, social and psychological dimension. It is more prevalent in aging persons and often more common and more severe in the last few weeks before death. Despite dyspnea being a highly prevalent symptom in older adults and more frequent with age regardless of the type of illness or community in which they live, research indicates dyspnea is inadequately assessed at the end of life. Dyspnea in the elderly is often associated with organic diseases, most common of which are heart failure, chronic obstructive pulmonary disease and asthma. Nevertheless, it can also be the result of or correlate with psychological disorders like anxiety, depression or panic disorders. While organic dyspnea can be treated with medical care successfully, social care seems to be optimal way of treatment when psychological disorders are present.

The aim of the study is to characterize which patients suffering from dyspnea need social care rather than medical care with special attention to patients living alone and to evaluate a possible relationship between dyspnea and loneliness in elder people.

MATERIAL AND METHODS

683 patients over 60 years of age, who presented with dyspnea at Kafr Saad Central Hospital between 1999 to 2010 were included in the study. Patients were divided into 3 groups: (1) from 60 to <70, (2) from 70 to <80, (3) ≥80 years old. Data on gender, educational status and marital status (married, widow, single – divorced or never married) were collected. Data on possible chronic chest diseases (present or absent), chronic heart diseases (present or absent), and chronic diseases other than pulmonary and cardiac (present or absent) were collected. Information on frequency of seeking medical advice due to dyspnea (frequent “≥1 attack every 2 months”, infrequent “≤ 1 attack every 2 months”) were collected. Information on social status were included into the analysis (lives alone, lives with others at night). All patients were divided into subgroups according to treatment options: medical care including drugs and/or manoeuvres and social care including sedatives in severe cases. To exclude acute organic causes of dyspnea, all patients underwent clinical examination, laboratory investigations, and radiologic examination as follows: CBC to exclude anemia, pulse oximetry to determine the hemoglobin oxygen saturation, ABG to exclude altered pH, BNP to exclude heart failure, cardiac enzymes and ECG to exclude acute ischemia and myocardial infarction, chest-X-ray and pulmonary functions to exclude pulmonary disease.

STATISTICAL ANALYSIS

All information fulfilled master table in Microsoft Excel 2010 program and were transferred to SPSS-16.0 for Windows program to analyse the data. Descriptive statistical analysis crosstabs and Chi-square methods to detect the significance of the analysis results were used. The result is significant when its p-value is ≤ 0.05.

LIMITATIONS

1. Some patients may suffer from mixed dyspnea (caused by medical and psychological factors), so it cannot be assumed that dyspnea successfully treated by social care is only psychogenic.
2. Locality of the studied patients as they were from one governorate, were administered to one hospital and examined and treated only by the author of the article.
3. Majority of the study was conducted during the recent unrest/revolution, when emotional elements were dominant.

RESULTS

Group of 683 patients consisted of 308 females and 375 males. 445 patients lived alone and 238 lived with others.

First aim of the study was to characterize which patients suffering from dyspnea need social care rather than medical care. Social care is a successful way of treatment for patients who live alone, complain of dyspnea frequently, are older and less educated. As for the diseases, patients with chronic heart disease or chronic diseases other than chest and heart are more likely to gain a profit from social care. Data are shown in Figure. 1.

The second aim of the study was to evaluate is there a relation between dyspnea and loneliness in elder people.

Patients living alone are significantly older. There was also a link between dyspnea (whether organic or psychogenic) and living alone. Patients living alone suffered from frequent attacks of dyspnea in 81.7% (364/445) compared to 33.6% (80/238) of patients living with someone. 90.3% (402/445) of patients who lived alone were successfully treated with social care and sedatives. In the group of patients who lived with relatives only 6% (15/238) were successfully treated with sedatives and social care (p =0.0001). Cross
relation between way of living (alone or with family) is shown in the table 1.

CONCLUSION AND DISCUSSION

Every patient aged more than 60 years presenting to ER with dyspnea should undergo investigations to exclude organic causes of dyspnea. Author suggests that following investigations should be performed at the beginning: ABG to exclude altered pH, BNP to exclude HF, pulse oximetry to determine the hemoglobin oxygen saturation, chest-X-ray and pulmonary functions to exclude pulmonary disease, CBC to exclude anemia, cardiac enzymes and ECG to exclude acute ischemia and myocardial infarction. However, we should pay special attention to patients that will be possibly better maintained with social care rather than medical care. Such patients were characterized above. However, there is one feature that particularly justifies the effectiveness of non-medical care, that is, living circumstances. There could be several reasons of this situation.

Patients living alone may be afraid of death especially at night when others are far away and no one can save them. Therefore they seek attention through involuntary dyspnea, trying to keep their relatives around them or to achieve continuous medical care. Once they are admitted to ICU, they sleep deeply. Such fear is not only extremely stressful for the patient, but it can also contribute to sleeping problems, that not only lower the quality of life, but may also result in increased risk of falls and injuries, anxiety, depression, nervous problems and other conditions. If such a situation exists, the role of the social care is to provide a caregiver who stays wakeful all over the night and does not leave the patient alone – especially at night and during sleeping time. The caregiver should also be chatty, provide regular medical reassurance and administer sedatives in severe cases. The last activity can be also effective even if patient does not need increased attention, but is not able to administer medications himself. Further studies are recommended to define the exact influence of social care on dyspnea treatment.

CITE THIS AS