

Awareness about Risk Factors in Patients after an Acute Heart Attack, An Exploratory Study in Albania

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Abstract: Background: Cardiac educational programs are intended to prevent the recurrence of heart failure and improve patients' quality of life. Public awareness of risk factors for ischemic heart disease is essential, but no measures of it exist in Albania where it is on the rise and the incidence of MI and other cardiac diseases are dramatically increasing. Aim: The aim of our study is to assess the knowledge levels of the risk factors in patients after an acute heart attack, because this information is the cornerstone for developing an educational program based on patients' needs. Methods: This is a descriptive study. We recruited 100 patients after an acute heart attack aged between 32-34 years old. Self-report questionnaires, which included general characteristics, disease-related characteristics and a pre-test/post-test design was conducted to assess needs of the patients, changes in knowledge and self-care abilities. Results: We found that more than 90% of patients desired information, particularly about heart failure symptoms, time to notify healthcare providers, prognosis, and exercise/physical activity. Of the 100 participants 61% were male, 59% were aged between 55 and 74 years, and 31.6% had not completed ten years education. Conclusions: Albanian patients after an acute cardiac event had a low level of knowledge about these diseases. These conditions can negatively affect clinical outcomes. This pilot study has indicated that a patient-centre educating is beneficial and is associated with an improvement in patients' knowledge and self-care abilities. Relevance to clinical practice: Therefore, this study will provide a basis for encouraging Albanian patients to obtain information about their disease and to guide professionals in developing education programs.

Keywords: patients after an acute heart attack, self-educational, healthcare professionals, self-care abilities.

1. Introduction

CVDs are the leading cause of deaths in both developed and developing countries. In 2008, 30% (17.5 million people) of global all-cause mortalities were from CVDs. Of these, 6.2 and 7.3 million were due to stroke and CHD, respectively. It is expected to increase to 23.3 million by 2030^[1,2]. Cardiac diseases are no longer restricted by geographical area or by age, sex, or socioeconomic boundaries. Heart disease has already reached epidemic magnitudes in poorer countries. Cardiovascular disease (CVD) is one of the most preventable causes of death in the world, due to the fact that the majority of its risk factors are preventable or controllable, such as hypertension, dyslipidemia, diabetes, obesity, smoking, lack of physical activity, stress, unhealthy dietary practices and diabetes^[3].

Patient education is key in order to detecting changes in body weight or clinical status early enough to allow the patient or a healthcare provider an opportunity to institute treatments that can prevent clinical deterioration in those patient with heart failure^[4-5]. The level of awareness of cardiovascular health modifiers among the Albanian population has not been clearly quantified. However, education of patients and their caregiver(s) can often be complex. It is critical for patients and their caregiver(s) to understand how best to comply with physicians and other healthcare providers instructions. Understanding care instructions has been associated with improved patient outcomes, such as reduced hospital readmissions. Knowledge of the risk factors is an important step in the modification of lifestyle behaviors conducive to optimal

cardiovascular health in developing countries. Yet, little is known about the CVD knowledge in the Eastern Mediterranean region, where only two studies were published. The first was conducted in the Gulf Cooperation Council (GCC) countries to assess the level of awareness of stroke risk factors and symptoms among the general population^[6]. The second was conducted in Jordan to examine the public knowledge and awareness of CVD and its risk factors^[7].

The goals of heart failure patient education are to help patients and their caregiver(s) acquire the knowledge, skills, strategies, problem solving abilities, and motivation necessary for adherence to the treatment plan and effective participation in self-care. Upon discharge, patient and caregiver(s) should be aware and supportive of self-care follow-up plans, how to care out self-care follow-up plans, and understand the importance of adherence to a patient's health-related quality of life^[8]. A lot of changes were in our country during transition period and the major transitions have had apparent influences on behavioural, social, and lifestyle patterns. Several studies showed insufficient knowledge and poor compliance to non-pharmacological management in heart failure patients.

2. Aim

The aim of our study is to assess the knowledge levels of the risk factors in patients after an acute heart attack, because this information is the cornerstone for developing an educational program based on patients' needs.

3. Methods

A descriptive study was performed in Polyclinic Nr.10 in Tirana, state polyclinic. This survey was conducted during the period from January to December 2015.

Ethical approval for this study was obtained from the Faculty of Technical Medical Sciences, University of Medicine, Tirana, Albania

Patients, who had passed an acute heart attack, were contacted and given an explanation with regard to the purpose of the study. They were free to refuse participation in the study. Data were collected anonymously via self-administered questionnaire. Those who agreed to take part in the study were given the questionnaires which were completed anonymously.

We recruited 100 patients after a cardiac event with age between 33-78 years old.

The enrolled patients were interviewed with structured questionnaire enquiring into their awareness of risk factors for a cardiac event and their knowledge level regarding these disease. To assess knowledge and identify risk factors, an in-depth structured interview questionnaire was prepared after review of literature. The first part of this questionnaire collect information about age, gender, weight, education, occupation.

The structured interview questionnaire with 20 questions with Yes/No choices or multiple choice questions related to modifiable risk factors of a cardiac event and to assess the knowledge about general awareness, clinical manifestations and prevention of ischemic heart disease and preventable or controllable risk factors such as hypertension, dyslipidemia,

diabetes, obesity, smoking, lack of physical activity, stress, unhealthy dietary practices and diabetes.

4. Results

The 100 patients consisted of 61(61%) male (aged 46.45±11.12 years) and 39(39%) females (aged 45±10.77 years) [Table 1], [Figure 1].

The 32 (32%) patients were primary education, 40 (40%) intermediate and 28 (28%) were graduates [Table 2], [Figure 2]. It was found that mean weight of 61 male patients (67.76±17.62) was higher than mean weight of 39 female patients (59.7±13.79).

We found that more than 90% of patients desired information, particularly about heart failure symptoms, time to notify healthcare providers, prognosis, and exercise/physical activity.

15 (15%) were between the age group 30 – 40 years, 26 (26%) were between 40 – 50 years,

29 (29%) were between 50-60 years and 30 (30%) were above 60 years of age [Table 3], [Figure 3].

Table 1: Frequency and percentage distribution of gender characteristics of patients after an acute cardiac event

	Male (n,%)	Female (n,%)	Total (n,%)
Number of participants	61 61%	39 39%	100 100%

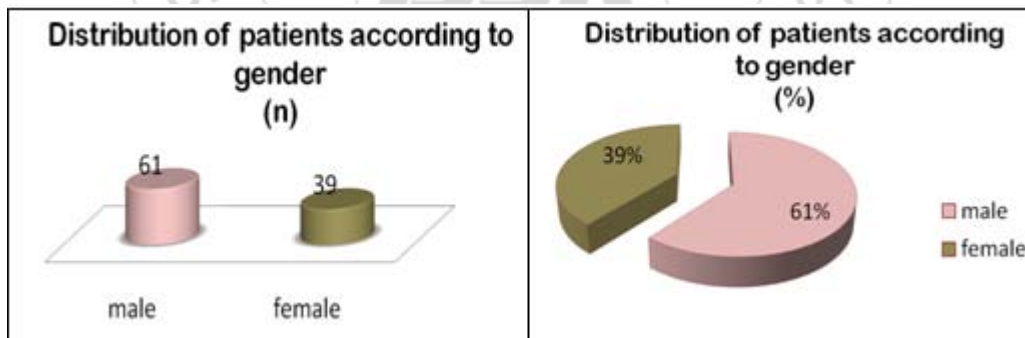


Figure 1: Frequency and percentage distribution of gender characteristics of patients after an acute cardiac event

Table 2: Frequency and percentage distribution of patients related education after an acute cardiac event

Distribution of patients related education	Frequency (n, %)
< 10 years	32 32%
High school	40 40%
University	28 28%
Total	100 100%

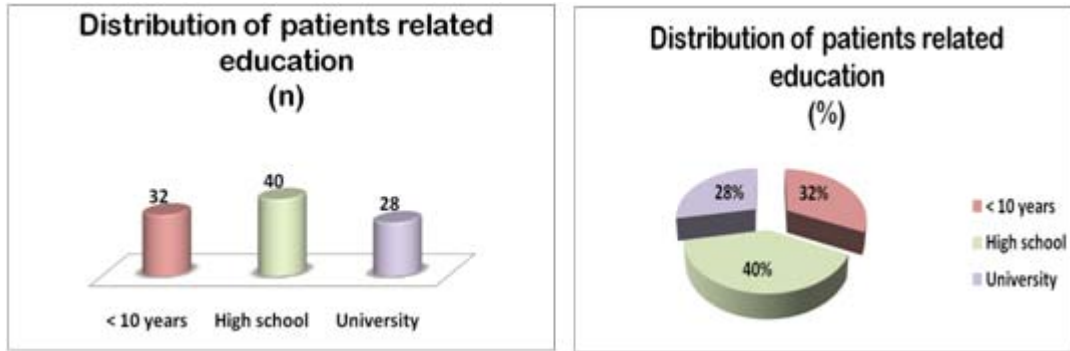


Figure 2: Frequency and percentage distribution of patients related education after an acute cardiac event

Table 3: Frequency and percentage distribution of patients related to age after an acute cardiac event

Distribution of patients related to age	Frequency (n, %)
30-40 years	15 15%
40-50 years	26 26%
50-60 years	29 29%
> 60 years	30 30%
Total	100 100%

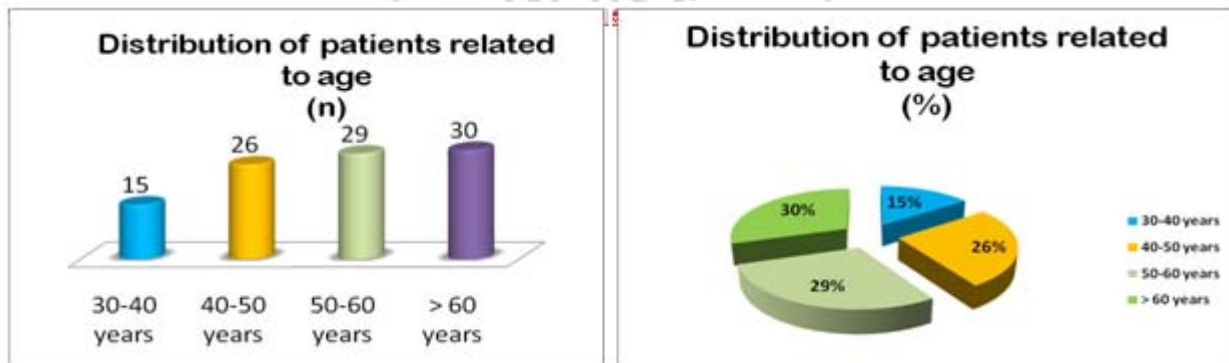


Figure 3: Frequency and percentage distribution of patients related to age after an acute cardiac event

Table 4: Frequency and percentage distribution of awareness of risk factors by the respondents

Awareness of risk factors by the respondents	Frequency (n, %)
A-smoking	65 65%
B-hypertension	61 61%
C-regular health checkup	21 21%
D- stress in family	40 40%
E- no exercise	29 29%

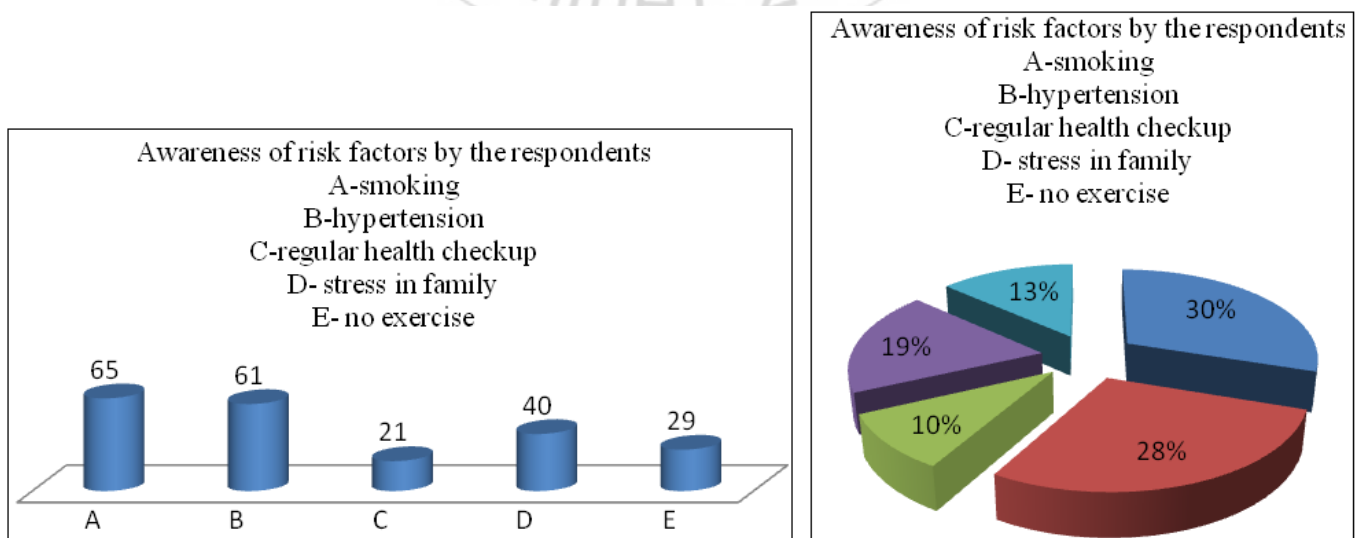


Figure 4: Frequency and percentage distribution of awareness of risk factors by the respondents

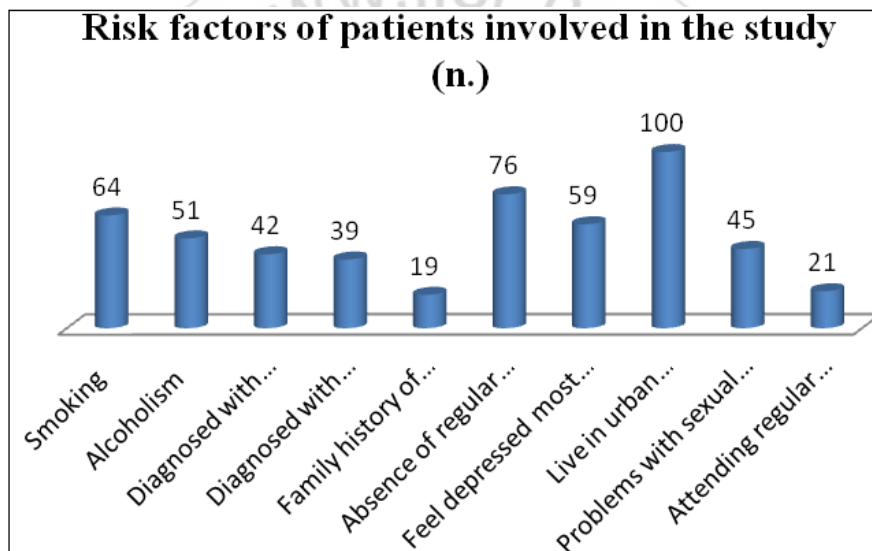
Table 5, Figure 5: Frequency and percentage distribution of risk factors of patients involved in the study

Risk factors	Frequency (n, %)
Smoking	64 64%
Alcoholism	51 51%
Diagnosed with hypertension	42 42%
Diagnosed with diabetic mellitus	39 39%
Family history of cardiac disease	19 19%
Absence of regular exercises	76 76%
Feel depressed most of the time	59 59%
Live in urban community	100 100%
Problems with sexual life	45 45%
Attending regular medication check ups	21 21%

5. Discussion

Economic growth in Albania has brought about marked change in lifestyle and in patterns of health and disease. The lifestyle of Albanians has become more sedentary and consumption of healthy food such as vegetarian food has decreased while the consumption of animal fats has increased. Regarding health status, morbidity and mortality

from coronary Heart Disease (CHD) rapidly increase. Various lifestyle factors such as, smoking, lack of exercise and inappropriate diet are the risk factors of atherosclerosis. Physiological factors such as, obesity, high Serum lipid level (cholesterol, triglyceride, HDL cholesterol and LDL cholesterol) and high blood pressure are also known as risks factors^[9].



Regarding gender of patients 61% (61) were males and 39% (39) were females. The findings related to gender were similar in other study^[10, 11].

Regarding mean weight of the patients we found that mean male weight were 67.76±17.62 and mean female weight were 59.7±13.79. The findings related to mean weight were similar in other studies^[12,13].

Regarding education 32% (32) had primary education, 40% (40) intermediate and 28% (28) were graduates. The findings related to education were similar in other study^[11].

15 (15%) were between the age group 30 – 40 years, 26 (26%) were between 40 – 50 years,

29 (29%) were between 50-60 years and 30 (30%) were above 60 years of age^[10,12,13].

In present study, 64% (64) had the habit of smoking and 51% (51) had the habit of alcoholism, results were almost similar with other studies^[10,11,12,13].

Mostly, 65% (65) had average level of knowledge regarding of awareness of risk factor as smoking, hypertension and stress in family but not for regular health checkup and daily exercises, 21% (21) of patients^[13,14,15].

We found that more than 90% of patients desired information, particularly about heart failure symptoms, time to notify healthcare providers, prognosis, and exercise/physical activity.

6. Conclusions

Albanian patients after an acute cardiac event had a low level of knowledge about these diseases. These conditions can negatively affect clinical outcomes. This pilot study has indicated that a patient-centre educating is beneficial and is associated with an improvement in patients' knowledge and self-care abilities.

7. Relevance to Clinical Practice

Therefore, this study will provide a basis for encouraging Albanian patients to obtain information about their disease and to guide professionals in developing education programs. This is the first questionnaire that has been developed to assess patients' beliefs about cardiac rehabilitation in our country. The evaluation is encouraging, showing evidence of internal reliability and validity, BUT, our study has limitations and further studies are necessary to fully validate the questionnaire.

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