

Nutrition among Umrah Visitors with Chronic Diseases

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التغذية بين ذوي الأمراض المزمنة من المعتمرين

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ملخص البحث (Abstract):

تنتشر الأمراض المزمنة بين عدد كبير من الحجاج والمعتمرين إلى درجة أنه يمكن أن يواجه المعتمر المصاب عدة مشاكل صحية أثناء تواجده بمكة المكرمة ولكن إذا خطط لرحلته ببساطة ومهد لها جيدا فحينها يمكنه أن يتعايش مع المرض المزمن ويستمتع بشعائر العمرة. هدفت الورقة إلى دراسة انتشار الأمراض المزمنة بين معتمري ١٤٣٩هـ وتوصيفها ديموغرافيا وتقييم الأنظمة الغذائية التي يتبعها المعتمر أثناء رحلته وقد بينت الدراسة أن ٨٠,٨% من بين ٤٠١ مريض يستخدم أدوية، وأن أكثرهم يعاني من مرض السكر (41.74%) يليه ضغط الدم (31.9%) فالأمراض التنفسية المزمنة (18.5%) ثم مرض القلب المزمن (٦,٥%). وقد وجد أن (٤٤,٩%) كان يؤدي شعيرة عمرة للمرة الثانية خلال ١٤٣٩هـ وأن ٥٩,٦% منهم يتبع نظاما غذائيا محددًا. وقد وجدت الدراسة أن هناك فرقا معنويا (معنوية اقل من ٠,٠٥) بين اعمار المعتمرين وأنواع الامراض المزمنة كما أنه لم تتوفر علاقة معنوية بين انتشار الامراض المزمنة بالنسبة للنوع (الذكور والاناث) وبين أنواع الطعام المتوفر (معنوية أعلى من ٠,٠٥). وخلصت الدراسة إلى أن ضرورة أن يستشير المعتمر طبيبا متخصصا في أمراض السفر ليتزود بأهم ما يفيد من معلومات ونصائح عن مرضه أثناء السفر، كما تنصح الدراسة بتوفير طعام صحي خاص بأصحاب الأمراض المزمنة في أماكن خدمة إطعام المعتمرين. كلمات مفتاحية: المعتمرون، أمراض مزمنة، التغذية.

Chronic conditions are thought to affect high number of the general population of pilgrims and Umrah visitors. With a little planning and preparation, people with chronic illnesses should have safe and enjoyable Umrah rituals. The study aimed to characterize association between chronic diseases and dietary regimens among Umrah visitors. Data collection questionnaire was designed for recording of the most expected diseases among Umrah visitors. The results showed that out of 401 Umrah visitors suffering from chronic diseases, 80.8% of them were on medication. The most disease was diabetes mellitus (41.4%) followed by blood hypertension (31.9%), chronic respiratory disease (18.5%) and chronic heart diseases (6.5%). Also 44.9% of them were doing Umrah for second time of their life and 59.6% of the patients had special food program. There was statistical significant between age and the type of chronic disease (p -value < 0.05), while there was no significant difference between the existing chronic disease in male and female and with the type of the food taken by Umrah visitors (p -value > 0.05). It could be concluded that those with chronic diseases should obtain a great deal of information and advice from a travel specialist doctor, and it is worthy that healthy foods should be promoted of at the visitors food services sites.

Keyword: Umrah visitors, Chronic Diseases, Nutrition.

Introduction

Chronic diseases are a disease that persists for 3 months or more [1]. Generally, there are slow in progression and long in duration. There are many types of chronic diseases are diabetes, cardiovascular such as heart attacks and stroke,

cancers diseases in addition to chronic respiratory condition such as chronic obstructed pulmonary disease (COPD) and asthma diseases [2]. Generally, they cannot be prevented by vaccines or cured by medication. Furthermore, chronic diseases cannot be communicated from person to person [3]. Travel medicine is a specialty that needs highly specialization in travel-related diseases. It needs an up-to-date knowledge of the worldwide epidemiology of diseases or conditions [4]. Worldwide, rates of international travel are growing continuously, about 1 billion travelers worldwide crossing international boundaries yearly [5]. In Saudi Arabia, the number of pilgrims in 2018 attracted more than 3 million pilgrims from 184 countries [6]. Increasing globalization in travel lead to increase the risk of travel-related illnesses and progress pre-existing health problems such as chronic disease. A traveler's health depend on a providing pre-travel counseling on appropriate interventions to promote health and prevent adverse health outcomes during travel [7,8]. Unfortunately, a small number of travelers will seek pre-travel health advice. Lack of awareness among travelers is not insured under health plans. Furthermore, those travelers who are consulting practitioners who are not eligible and specifically trained to recommend patients on travel [9,10,11,12]. Some studies suggest that pre-travel care should achieved by practitioners who are certificated in the field of travel medicine (i.e. provided by local or international society of travel medicine) [13]. Progressive of chronic disease may kill three in five people worldwide and then becomes a leading cause of mortality in the world by representing 60% of all deaths. Moreover, it cause great socioeconomic problems within all countries, particularly developing nations [2,14]. In developed countries such as United State, 88% of Americans over 65 years have at least one chronic disease [1]. On the other hand, poor diet is a major contributor cause of chronic disease and death in America [15]. Nutritional treatment in early stages of chronic kidney disease could prolong life [16]. Malnutrition and protein-energy wasting has been demonstrated to be strongly related to mortality in chronic kidney disease patients [17] [18]. During traveling, chronic disease care has become more complicated because easily access to highly processed foods and low consumption of freshly food [19]. The increasing physical activity and reducing intakes of highly rich foods with drinks in sugars, can prevent unhealthy weight gain. More recent studies have not shown much improvement in the low prevalence of healthy lifestyle practices [20,21]. Moreover, studies have shown that clinicians' knowledge and counseling about healthy diets are lacking [22]. May be it is not easy to diabetic patients to find the recommended nutrient intakes described within dietary guidelines. The efforts of individuals and their healthcare providers, strategies to increase the nutritional quality of prepared foods could gain improved widespread benefits [23] [24]. Finally, CDC (Centers for Disease Control and Prevention) provide health Information for International Travel commonly called the Yellow Book published every two years as a reference for health professionals providing care to international travelers [25]. The study aimed to characterize association between chronic diseases and dietary regimens among Umrah visitors during the first Umrah season in 1439.

Research aims

The study aimed to characterize association between chronic diseases and dietary regimens among Umrah visitors during the first Umrah season in 1439.

Research methodology

The study was conducted at Holy City of Makkah Al Mukarramah, during Umrah season that at the first months of 1439 (1st September till 31th of December 2017). Inclusion criteria was Simple random 401 travelers (Umrah visitors) using data collection questionnaire designed for recording of the most expected chronic diseases among Umrah visitors, while

the non-Umrah visitors were excluded. Socio-demographic characteristics: such as age, level of education, job, marital status, education, job, socio economic status, Medical history and nutritional survey (Weather participant take white or brown rice and bread, low or whole dairy products, low fat meat or chicken, low or regular sugar beverage, fresh or canned salty food, well-cooked or raw food). Data entry and statistical analysis was done using SPSS 21.0 statistical software package.

Results and discussion

Travel to Makkah can be relaxing and rewarding, but people with chronic may face unique challenges when they travel overseas, but sometimes the physical demands of travel can be stressful. the of most common chronic diseases and their dietary regimens during the first Umrah season in 1439 after Hajj 1438H (2017). In the present study, four hundred and one were the Umrah visitors who were declared that they had chronic diseases, most of them (65.8.3%) were male (Figure1) while (90.3.8%) married (Figure2). About 60.6% of the patients were from the age group 21-40 years old, none were more than 80 years (Figure3). The present study, showed that most of the Umrah visitors with educational secondary school level (62.1%) while 37.4% of them were of university educational level of or higher (Figure.4). The commonest nationality of Umrah visitors with chronic diseases was Saudi (21.7%), followed by Bangladesh (19.7%) and Egyptian (14.4%)(Figure.5). The results of the present study was closed to previous studies (28) which showed Saudi citizens represented 42.5% of the total patients where the incidence in Saudi patients was more than that in other nationalities. The present study showed that the commonest chronic disease encountered among Umrah visitors was Diabetes Mellitus (41.4%), followed by blood hypertension (31.9%), chronic respiratory disease (18.5%) and chronic heart disease (6.5%) inflammatory bowel syndrome (1%)(Figure.6).

In other study, it was reported that residents with a history of migration with a higher prevalence of chronic diseases such as cardiac diseases, hypertension, and diabetes (26). Statistically, the present study showed significant association between age and the type of chronic disease (p -value <0.05), also there was no significant association between the chronic diseases and the gender (p -value > 0.05). Diabetes leads to increased risk of heart disease, kidney disease, stroke and infections. Cardiovascular diseases are major etiologic morbidity factors in the world due to unbalanced diets and physical inactivity. More than half of international travelers to developing countries become ill during their trip, and very low numbers look for medical care for a travel-associated illness either during their travel (27). So any chronic illness, such as diabetes, blood pressur or kidney disease may add challenges to the traveler. Advance planning is the key to a successful Umrah visit trip. Bone diseases a problem of older people. Adequate intakes of calcium and vitamin D in patients with high osteoporosis rates may help to reduce fracture risk. Also the sun exposure and physical activity may strengthen bones and muscles. The highest frequency of Umrah visits (44.9%) among Umrah visitors was for the second time per year and 24.4% had an average annual visit frequency of 3 times (Figure.7). In the present study 80.8% of the patients on medication (Figure 8). In the present study (39.9%) the Umrah visitors travelled to Makkah without consulting a specialist doctor, also 31.7% of them used to make regular medical check only one time before travelling while 28.4% of them used make medical check for two times (Figure9). Most participants (72.1%) used to do periodic laboratory and measurement tests (Figure10). Each Umrah visitor needs to schedule an appointment with a travel specialist doctor as soon as possible and may need additional health and travel needs and medical investigation, in additional to bring extra medication packed in visitors carry-on luggage. Medications purchased abroad may not meet

Saudi standards. All medications and supplies. Also, the study showed, most of the visitors were on medication. So it is very important to consider bringing copies of visitors prescriptions, wearing a medical alert bracelet and a first aid kit packed with over the counter medications approved by the physician. Also, 59.6% of the patients had diet food program (Figure11). Also, 78.3% used only white bread/rice for eating (Figure.12) and while 71.1% and 28.9% had chicken/meat with regular and low fat in their meals, respectively (Figure.13), also 62.3% and 37.7% of them were had regular and low fat a dairy product with in their meals, respectively (Figure.14) and 71.1% and 28.9% of them were had regular and low sugar beverage product, respectively (Figure 15). The rapidly increasing burden of chronic diseases is a key determinant of global public health. For healthy diets, healthy foods should be promoted of at Umrah visitors food services. For diabetic patients, overweight and obesity and physical inactivity may raise the rates of type 2 diabetes. During travelling, increased physical activity and maintaining a healthy weight can prevent and help the treatment of diabetes. Risk of chronic diseases such as heart disease and stroke, is reduced by eating low saturated fats, enough amounts of fruits and vegetables and low salt. In addition by practicing physical activity and controlling weight. Reduction of salt intake helps reduce blood pressure and consequently a reducing cardiovascular diseases. Dietary modifications are common treatment plans for patients with different chronic diseases. It was found that the patient who read labels on the food packages used less energy, low saturated fat, carbohydrates, and sugar, and more fibers than those who did not (29). Such findings reflect the value of dietary counseling in chronic disease management (29). The present study showed no significant association between the chronic diseases and type of the food taken by Umrah visitors (p -value > 0.05). It could be concluded that chronic diseases among Umrah visitors are variable. Those with chronic disease should obtain a great deal of information and advice from a travel specialist doctor and may need to carry an extra medication. Healthy foods should be promoted of at Umrah visitor's food services.

Summary and conclusion

It could be concluded that chronic diseases among Umrah visitors are variable. Those with chronic disease should obtain a great deal of information and advice from a travel specialist doctor and may need to carry an extra medication.

Recommendations

1. Umrah visitors with chronic disease should obtain a great deal of information and advice from a travel specialist doctor e
2. Healthy foods should be promoted at Umrah visitor's food services.

Figures and Tables:

Gender %

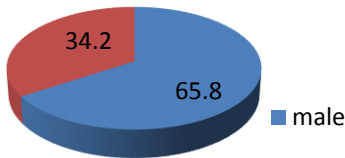


Figure1. Frequency of gender

Marital status %

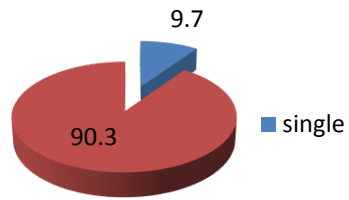


Figure.2 Frequency of married patients

Age group %

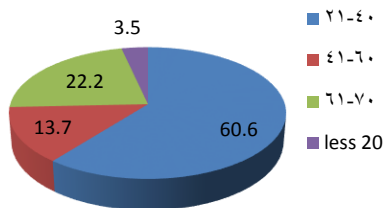


Figure 3. Frequency of Age group

Education %

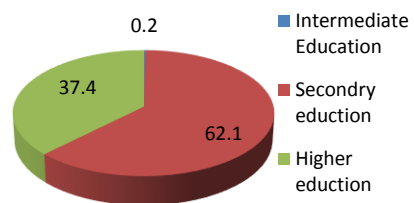


Figure 4. Frequency of Education level

% Nationality

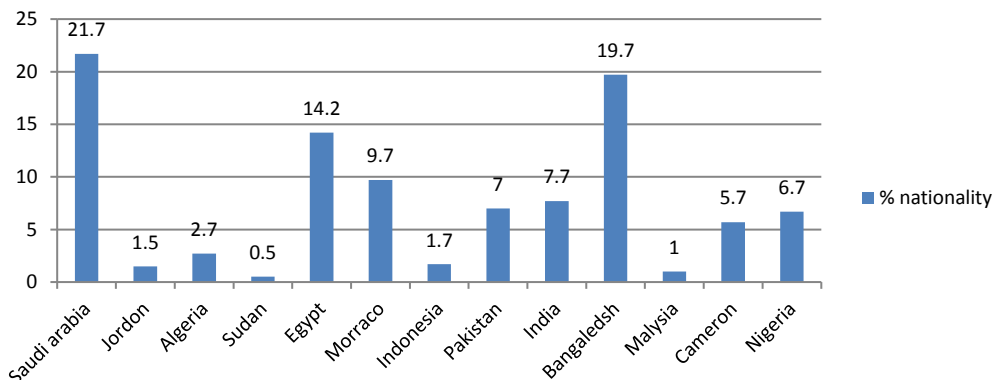


Figure.5 Distribution of chronic diseases according to nationality

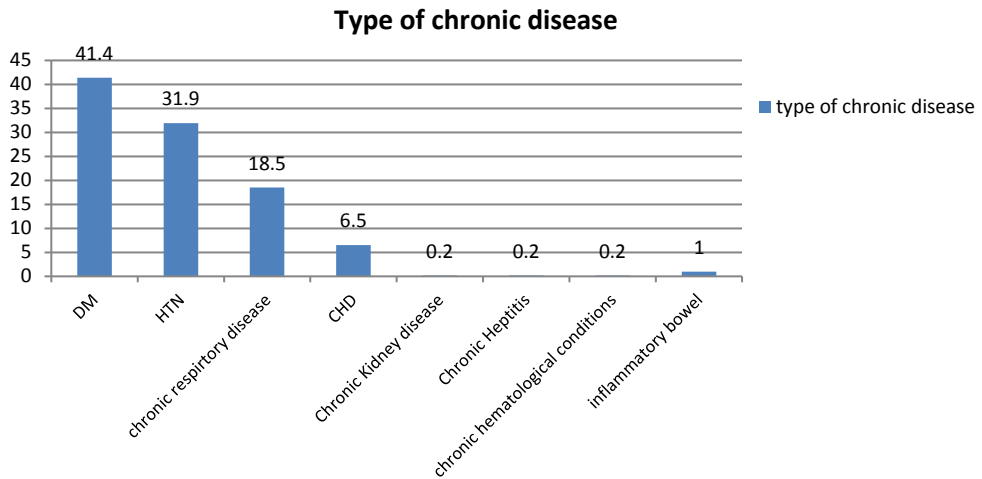


Figure.6 Distribution of chronic diseases among Umrah visitors.

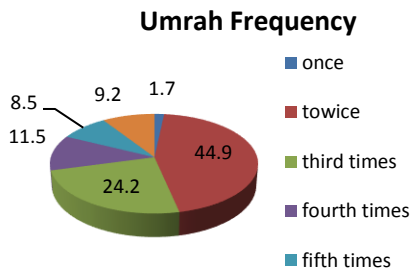


Figure.7 Frequency of Umrah visits frequency

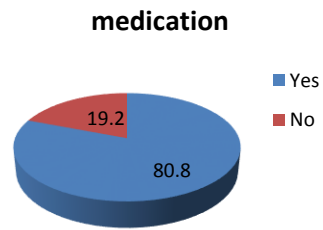


Figure.8 Frequency of patients on medication

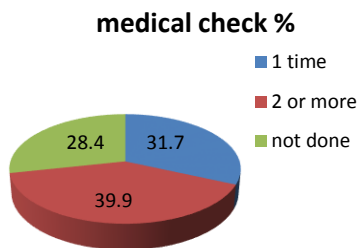


Figure.9 Frequency of medical check

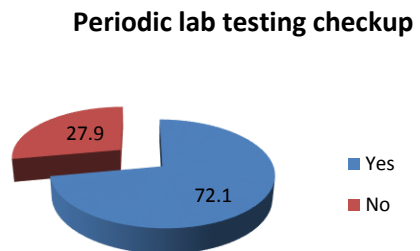


Figure.10 Periodic test checkup

Taking special meals

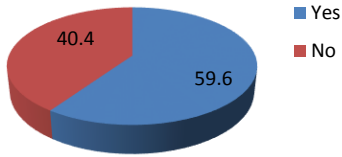


Figure.11 Special food program

Type of rice and bread

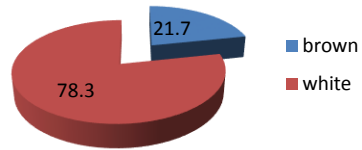


Figure.12 Type of rice/bread used

Meat and chicken

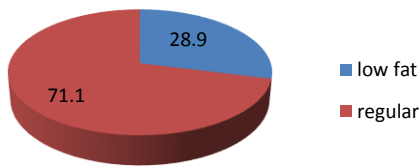


Figure.13 Meat /chicken type

Dairy product

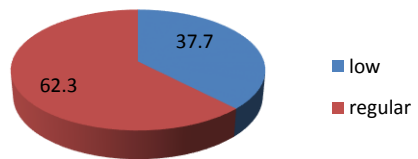


Figure.14: Dairy product type

beverage type %

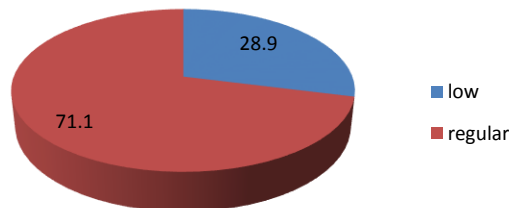


Figure.15 Beverage product type

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