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Investigating the Relationship of Primary Healthcare Promotion Practices, Lifestyle, and Chronic Diseases among the Elderly of Zahedan City in the Year 2015

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ABSTRACT

The increase in the Elderly population during the current era is so significant that World Health Organization [WHO] has stated that nowadays, a revolution in demography is about to occur globally. As the age grows, the number of the chronic diseases of the last years of life grows too. Although these diseases are lethal by themselves, they can threaten the life quality of people and lead to early and severe disabilities. Therefore, this article investigates Primary healthcare promotion practices, Lifestyle, and Chronic Diseases among the Elderly of Zahedan City.

Methodology: This is a sectional descriptive analysis and the study population includes every living person in Zahedan city who was 60 years old or more ate the year 2015. The statistical universe size was 30,000 people. The required data were gathered by questionnaires and later analyzed by SPSS [v. 21] software.

Findings: Findings showed that most of the Primary Healthcare Promotion Practices were neglected in our society. The highest average mark for lifestyle belonged to prevention among the graduated people and its lowest belonged to sports and leisure among illiterate people. On the other hand, the highest average mark for lifestyle was in

prevention field and among those who did not have chronic disease and its lowest was in sports and leisure field among the chronic diseases patients.

Conclusion: By adjusting the lifestyle and improving the personal healthcare and doing the primary healthcare promotion practices, many of the chronic and inflectional diseases can be prevented. Therefore, it is necessary to raise people's awareness before entering the elderly to modify the lifestyle and implement the primary healthcare promotion principles and avoid many chronic and inflectional diseases.

Key word: Elderly, Zahedan, Health

INTRODUCTION

The increase in the Elderly population during the current era is so significant that World Health Organization [WHO] has stated that nowadays, a revolution in demography is about to occur globally [1]. Medical advances in the second half of the twentieth century led to increase in the elderly population and it is predicted that the number of elders reach from 650 million to 2 billion people by the year 2050 [2]. Also in Iran, the elderly population rate is growing as natality rate is dropping and better access to healthcare is being provided [during the past 30 years, the elderly population of Iran has twice increased] and currently about 7.8% of the population is made of people who are 60 years old or more [3]. As the age grows, the number of the chronic diseases of the last years of life grows. About 75% of people aged more than 65 years have at least one chronic disease and about 50% of them have two chronic diseases. A lot of studies have been performed around the world about the role of chronic diseases in creating disabilities among the elders [4]. Cancer, stroke, diabetics, heart disease, lung disease, urinary incontinence, depression, joint disorders and high blood pressure are among the most common chronic diseases among the elderly [5]. Although these diseases are lethal by themselves, they can threaten the life quality of people and lead to early and severe disabilities. Studies show that two main death causes [cardiovascular, cancer] in the elders are similar with the two main general death causes which they can be avoided in life time by omitting the dangerous elements and therefore this makes the lifestyle change and omitting the dangerous elements more significant and on the one hand in this era of life, the elder is potential to have many inflectional diseases due to chronic diseases and weakened immune system that can be avoided by adjusting the lifestyle and promoting the individual health situation [6]. Regardless of demographic differences, public emphasis among the world is on individual preventing health promotion. Healthcare promotion and diseases prevention activities include primary prevention or preventing the disease before its appearance and secondary prevention which investigates the existence or non-existence of the disease in early stages. Common performed interventions for primary prevention are: sticking to a series of healthcare practices such as low fat diet, especially saturated fats, regular exercise, quitting smoking and drinking [7]. Studies show that decreasing the high blood cholesterol and picking a low cholesterol diet reduces the chance of cardiovascular diseases. It should be noted that WHO leaders suggest participation in healthcare practices for every age, but when human being live longer, health promotion practices become more important, especially by considering the WHO goals, to maintain the performance, independency, and life quality improve [8]. The aims of health promotion and chronic diseases prevention are maintaining the independent performance, improving the life

expectancy, and maintaining and improving the life quality. Therefore, this article investigates Primary Healthcare Promotion Practices, Lifestyle, and Chronic Diseases among the Elderly of Zahedan City.

METHODOLOGY

This is a sectional descriptive analysis and the study population includes every living person in Zahedan city who was 60 years old or more ate the year 2015. The statistical universe size was 30,000 people and the samples number was 379 based on Morgan's sample size determination formula. By referring to each healthcare unit, firstly based on the 2015 census bureau, every family who had a member aged 60 years old or more were extracted and then selected by random sampling. The study entrance criteria were the age of 60 or more, earning the 24 or higher mark from the Mini Mental State Examination [MMSE] questionnaire and the participant's satisfaction. In case the participant could not answer, the questions would be asked from an informed attendant and if no such person was reachable, the sample would be replaced by the next family from right based on the existing addresses. MMSE is a 30-item standard questionnaire for analyzing the mental health condition and investigates the awareness of time and place, ability to write, attention and calculation reminders and speech capability. The scores of this questionnaire vary from 0 to 20. Validity and reliability of this questionnaire has been proved in the study. The data collection tool was face to face interview based on the questionnaire and in some cases which there was not adequate time, the remainder of the interview would be completed by phone call. The questionnaire includes these parts: demographic characteristics, chronic diseases history, physical health condition, mental health condition, healthcare promotion practices and healthy lifestyle. In the demographic characteristics subcategory, age, sex, education level, adequate income for cure and insurance were evaluated. In chronic diseases history subcategory, occurrence of diseases such as arthritis, diabetics, cardiovascular diseases, stroke, cancer, eyesight problems, depression or anxiety, Parkinson, yes/no questions asked high blood pressure and digestive diseases. In healthcare promotion practices subcategory, sporting activities, low cholesterol diet, high fiber, low salt foods and smoking were investigated. In healthy lifestyle subcategory, physical activity, sports, leisure, healthy diet, stress management, social and interactional relationships were evaluated. In order to authenticate the validity and reliability of the questionnaire, to reduce the data factor analysis and main components methods were used and for rotation the Varimax method was used and for reporting the findings the descriptive analysis was used, its validity and reliability was proved and Cronbach's alpha coefficients was calculated as 0.76. The collected data were gathered by questionnaires and later analyzed by SPSS [v. 21] software.

FINDINGS

In this investigation 379 elders were studied which 216 of them [56%] were male and 163 [43%] female. MMSE was determined at 28.37 ±3.5 which shows good physical and cognitive health of the participants.

Table-1: the frequency distribution of the elderly people of Zahedanby sex and age

	Man-Number	**Woman-Number**	**total**
60-64	50	39	89
65-74	113	76	189
75-84	53	30	83
above 85 years old	10	8	18
total	214	163	379

Other demographic features and chronic diseases' records of participants in the study is summarized in table 2.

Table-2: Relative and absolute frequency of some demographic features and chronic diseases' records of samples

Variant	**Measurement level**	**Number [N]**	**Percentage %**
sex	Female	163	43
	Male	216	57
Education	Illiterate	224	59.2
	Under diploma	87	22.9
	Diploma	68	17.9
Enough income for treatment	Yes	307	81
	No	72	19
Insurance	Yes	273	72
	No	106	27.9
Occupation	Employed	299	78.8
	Unemployed or retired	80	21.1
Digestive problems	Yes	64	17.6
Heart problems	Yes	60	15.8
History of brain stroke	Yes	42	11
History of cancer	Yes	15	¾

Eyesight problems	Yes	87	22.4
Depression or anxiety	Yes	14	3.6
Parkinson	Yes	15	3.9
High blood pressure	Yes	61	16
Arthritis	Yes	11	2.9
Rheumatoid and degenerative	Yes	10	2.6

Absolute and relative frequency or lack of health promotion practices in samples is showed in Table 3. Based on analysis results, education level [B=0.21, P=%1] and mental health condition [B=0.26, P=%2] were effective factors for exercising. Income [B=0.73, P=%1] was the effective variable in receiving low cholesterol diet, and gender [B=0.92, P=0.001] was the effective variable in not smoking. Effective variables to take fecal occult blood test were mental health condition [B=0.32, P=0.001], and age [B=0.42, P=0.03]. In other cases, there was no relation between dependent and independent factors [B=0.42, P=0.03].

Table-3: Absolute and relative frequency of health promotion practices in samples

Scale /Health promotion practices	**yes**		**no**	
	number	**percentage**	**number**	**percentage**
High-fiber diet	107	28.2	272	71.8
Occult blood testing	113	29.8	266	70.2
Low salt diet	231	60.9	148	39.1
Exercise	95	0.25	284	75
Lowering foods' cholesterol	212	55.9	167	44.1

Smoking	109	28.7	270	71.3
Skin examination	23	0.06	356	94

The average of lifestyle mark in general and details based on the sexes in presented in table 4.

Table-4: The average of lifestyle mark of the participants divided by their analysis field in both sexes

Sex	**Total**	**Prevention field**	**Sports and leisure field**	**Food field**	**Stress field**	**Relationships field**
Male	166.11	65.7	13.71	39.39	22.29	25.02
Female	154.12	66.35	11.12	34.25	17.98	24.32
Total	159.34	65.65	11.32	37.94	19.32	25.11
P amount	P<0.02	P<0.002	P<0.004	P=0.17	P<0.001	P<0.001

The research findings showed that the highest lifestyle mark average was for prevention field among the university educated individuals and its lowest belonged to sports and leisure among the illiterates.

Table 5

	Living alone		**Education level**		
Lifestyle mark	Yes	No	Illiterate	Diploma	University educated
Prevention field	66.53	61.5	65.42	68.53	70.63
Sports and leisure field	14.2	15.34	12.18	15.53	20.36
Food field	41.74	40.6	32.54	33.47	34.98
Stress field	12.95	16.78	14.9	17.34	20.63
Relationships field	25.71	28.43	27.24	27.32	33.54
Total	161.3	162.65	152.28	161.69	180.14

On the other hand, the highest lifestyle mark average was in prevention field and among those who did not have chronic diseases and its lowest was in sports and leisure among the chronic diseases patients.

Table-6: frequency distribution of lifestyle mark based on chronic diseases

variant	**Chronic disease**	
Life style mark	Yes	No
Prevention field	56.47	60.24
Sports and leisure field	13.47	15.64
Food field	33.34	33.14
Stress field	18.08	19.23
Relationship field	24.27	29.15
Total	145.63	157.4

DISCUSSION

In this article the relationship among health promotion practices, lifestyle and chronic diseases has been studied. There were 216 male [57%] and 163 females [43%] subjects participating in the present study. 54% of participants were male and 46% were female in Sargazi et al study. In dividing the lifestyle into different fields, males in sports and leisure, stress, food, and social relationships got meaningful higher marks .13.17% of men and 11.2% of women were reported to take part in physical education and recreational activities. Sargazi et al study stated that 37% of men and 14.5% of women took part in physical activities.

In other words, males have more and higher social relationships due to greater freedom and Islamic societies cultural factors. The age range of 65-74 had highest frequency. In a similar study, conducted by Borhani Nezhad et al, it was stated that the highest frequency belonged to the age range of 60-74.

In analyzing the relationship among the variant, marital status and life quality, the results showed that total mark for lifestyle in married people is higher than the other elders' life quality. According to Borhani Nezhad et al study, there is a positive relationship between health literacy and education [p=0.021] [9]. Sraeli et al study stated that increase in the level of higher education will enhance health literacy of society. Education was introduced as a variable effective on health issues in Chou et al study. [12]

In this study, in the diseases' analysis part, blindness and hearing loss among men and diabetics and eyesight loss among women were meaningfully more common, but no meaningful difference was observed in age and other chronic diseases relationship in two sexes. More lung diseases among males may be due to higher smoking rates [28.8 compared to 3.4] and more diabetic occurrence among females may be due to probable extra weight and obese in women [51.6 compared to 36.8], higher average body mass index [25.6 to 24.5] and less mobility [0.74 compared to 0.61] among them. Also, this issue has been less scrutinized in the realm of the health of the elderly. those elders

with chronic diseases got lower marks in all of the fields except for food field and it can be justified by considering their disabilities. As it was observed, the lifestyle mark in the food field had no meaningful statistical relationship with any variant except for education level. This can be clearly witnessed in other studies conducted in the same field. [9, 10, 13]. This subject shows the significance of proper informing and holding educational classes for healthy diet and especially the important impact of education on public health.

The level of education was classified as illiterate [59.2%], less than college [22.9%], and college diploma [17.9%] in the present study. Kakhki et al study reported educational level division as primary education [47.6%], guidance school [21.1%], high school [17.8%], and university education [13.5%]. [14]

The results of study on primary healthcare promotion practices showed that 24.8 percent of the participants had sport activities, 66.8 percent were nonsmokers and 25.6 percent had high fiber diet. In our study, 27.7 percent of the participants had taken fecal occult blood test and 7.4 percent of them had taken dermatological examination for the lesions.

Cardiological disorder, with a rate of 15.8%, had the highest frequency among the elderly; this rate was 23.3% in Sargazi's study. In our study, the elders' income level had strong relationship with cholesterol reduction [b=0.73] but there was no meaningful relationship between adequate income and other healthcare promoting practices

According to Raei et al study, there is no significant relationship between the level of income and the quality of life [p=0.01] [15] Although 74% of the participants stated that they had adequate income for treatments, it is possible that many of them have not wanted to state their financial situation as inappropriate. Therefore, this variants data is not so exceptional. Those who had higher educations and better mental health condition were more eager to do these practices [16]. The rate of smoking was reported to be 14.1% in Habibi et al study [17,19]. In terms of health insurance status, 72% were covered by insurance. In a similar study, conducted by Nejati, it was stated that 64.2% of people were covered by insurance. [18, 20]

The participants in the higher ages (71-80) group showed lower desire to follow healthcare promotion practices. Mental disability is another problem among the elders for following the healthcare promotion practices as they forget to visit the healthcare units regularly or they cannot follow the healthcare instructions due to their mental problems. At the end, it can be concluded that by modifying the lifestyle and promoting the individual health condition and following healthcare promotion practices, many of the chronic and inflectional diseases could be avoided. Therefore, it is necessary to raise people's awareness before entering the elderly age to modify the lifestyle and follow healthcare promotion practices to avoid early occurrence of many chronic and inflectional diseases.

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