Ain shams university

Faculty of medicine

PREVALENCE OF HYPERTENSION AND QUALITY OF LIFE AMONG HYPERTENSIVE PATIENTS IN AN EGYPTIAN VILLAGE

Thesis Submitted By

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بسم الله الرَّحْمَن الرَّحِيمِ

"قالُواْ سُبْحَانَكَ لاَ عِلْمَ لَنَا إلاَّ مَا عَلَّمْتَنَا إنَّكَ أنتَ الْعَلِيمُ الْحَكِيمُ"

صدق الله العظيم

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List of abbreviations

ACEIs	Angiotensin-Converting Enzyme inhibitors
ARBs	Angiotensin II receptor blockers
BBs	Beta blockers
BMI	Body mass index
BP	Blood pressure
CCBs	Calcium channel blockers
CDC	Center for disease control and prevention
CVD	Cardiovascular diseases
DBP	Diastolic blood pressure
DM	Diabetes mellitus
DOM	Domain
HRQOL	Health related quality of life
HTN	Hypertension
NIH	National institute of health
QOL	Quality of life
SBP	Systolic blood pressure
WHO	World health organization

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Abstract

Prevalence of hypertension and quality of life among hypertensive patients in an Egyptian village

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Background: Systemic Hypertension (SH) is a major cardiovascular risk factor with a high prevalence in almost all countries and is one of the leading risk factors for global mortality. It is estimated to have caused 7% of disease burden in 2010 and 9.4 million deaths. Studies show the negative effect of systemic hypertension on health-related quality of life.

Objective: To measure the prevalence of hypertension and its risk factors among residents of a village in Menoufia governorate and to examine the quality of life among the study population in the same village.

Participants and methods: The study was a cross sectional design with multistage random sampling. The research included six hundred people representing 10% of the population of Meet El Moze village in Shebin El Kom, Menoufia, 90 km northwest Cairo in Delta. Adults of both sexes aged 18 years or older were included. The chosen households were visited where filling the questionnaires and the clinical examination was carried out.

Results: The results indicate that the prevalence of hypertension was 38.2% in Meet El Moze village as an indicator to the rural areas in Egypt.

Abstract

Overweight and obesity were the most modifiable risk factors of hypertension. The quality of life was worsened among hypertensive patients.

Conclusion: It is concluded that hypertension is prominent in rural areas and affects the quality of life of hypertensive patients.

Keywords: Hypertension, prevalence, quality of life, rural

Introduction

Normal adult blood pressure is defined as a systolic blood pressure of 120 mm Hg and a diastolic blood pressure of 80 mm Hg. Hypertension is defined as a systolic blood pressure equal to or above 140 mm Hg and/or diastolic blood pressure equal to or above 90 mm Hg. **(WHO, 2013 A).**

Prehypertension is blood pressure that is slightly higher than normal between 120/80 mmHg and 139/89 mmHg. Prehypertension increases the risk that the patient will develop chronic, or long-lasting, high blood pressure in the future. **(CDC, 2014).**

Raised blood pressure is one of the leading risk factors for global mortality and is estimated to have caused 7% of disease burden in 2010 and 9.4 million deaths. **(Lim et al., 2012).**

Raised blood pressure is a major cardiovascular risk factor. If left uncontrolled, hypertension causes stroke, myocardial infarction, cardiac failure, renal failure, dementia and blindness, causing human suffering and imposing severe financial and service burdens on health systems. **(WHO, 2013 A).**

Hypertension is asymptomatic and is usually diagnosed incidentally or after major organ damage has occurred. Given the asymptomatic nature of hypertension, its detection is usually incidental, and at times only occurs after significant complications have arisen. **(WHO, 2002).**

Self-awareness, as well as the treatment and control of hypertension are very low in both low **(Musinguzi and Nuwaha, 2013)** and high-income countries, **(Falaschetti et**

al., 2009), however in the united states of America, **Igho and Ofili (2008)** noted that self-awareness, pharmacologic treatment, and control rates of hypertension are 81.9%, 76.4% and 53.3%, respectively.

Independent risk factors for hypertension are obesity, alcohol consumption, high dietary salt intake, low dietary intake of calcium and potassium, psychosocial stress, low levels of physical activity, and family history of hypertension. **(Kotchen, 2007).**

The global prevalence of raised blood pressure (defined as systolic and/or diastolic blood pressure ≥140/90mmHg) in adults aged 18 years and over was around 22% in 2014. The proportion of the world's population with high blood pressure or uncontrolled hypertension fell modestly between 1980 and 2010. However, because of population growth and ageing, the number of people with hypertension has risen over the years. In general, the prevalence of raised blood pressure was higher in low-income countries compared to middle-income and high-income countries. **(WHO, 2013 A).**

Across the WHO regions, the prevalence of raised blood pressure was highest in Africa, at 30% for all adults combined. The lowest prevalence of raised blood pressure was in the Region of the Americas, at 18%.

Hypertension in Africa has now changed from a relative rarity to a major public health problem **(Opie and Seedat, 2005).** It has become the commonest cause of cardiovascular disease on the continent. If nothing is done about it, by 2020, three-fourth of all deaths in Africa will be attributable to hypertension. **(Kearney et al., 2005).**

Hypertensive diseases represent a major disease burden in Egypt, and has been estimated to be responsible for 9% of the years of life lost (YLL). **(NCHP, 2004).**

In Egypt, the Egyptian National Hypertension Project (NHP) was carried out in 1991 to provide an estimate of hypertension prevalence, awareness, treatment and control among Egyptians aged 25 and above and the prevalence was 26%. After that the Stepwise survey conducted in 2005-2006 reported the prevalence also 26%. (**Ellabany and Ahmed, 2010).**

The prevalence increased in 2008 to become 35%, for Males 35.5% and females 34.5%. **(WHO, 2011).**

The most common clinical presentations of hypertensive emergencies are cerebral infarction (24.5%), pulmonary edema (22.5%), hypertensive encephalopathy (16.3%), and congestive heart failure (12%). Other clinical presentations associated with hypertensive emergencies include intracranial hemorrhage, aortic dissection, and eclampsia, as well as acute myocardial infarction. **(Zampaglione et al., 1996).**

Hypertension is also one of several conditions that have been increasingly recognized as having an association with posterior reversible encephalopathy syndrome (PRES), a condition characterized by headache, altered mental status, visual disturbances, and seizures. **(Staykov and Schwab, 2012).**

The researcher chose this village in menoufia governorate because he noticed that there is modernization in the life style of the people in the village. The people

became have some traditions similar to those of people in the urban areas. There is more attention to the mass media as television and internet and also there is lack of exercise.

Health Related Quality of Life (HRQOL) is defined as "a person's perceived quality of life representing satisfaction in those areas of life likely to be affected by health status" **(Bredow et al., 2008).** The concept of HRQOL has being used by health care professionals to describe factors other than illness affecting human health and its status. These different health dimensions help healthcare professionals to understand patient perceptions of illness **(Saleem et al., 2012)**. The development of chronic conditions with decreased life expectancy can be disturbing for the patients. **(Kwok et al., 2010).**

Focusing on HRQOL as a national health standard can bridge boundaries between disciplines and between social, mental, and medical services. Several recent federal policy changes underscore the need for measuring HRQOL to supplement public health's traditional measures of morbidity and mortality.

Healthy People 2000, 2010, and 2020 identified quality of life improvement as a central public health goal. HRQOL is related to both self-reported chronic diseases as hypertension, and their risk factors (body mass index, physical inactivity, and smoking status). **(CDC, 2011 A).**

Measuring HRQOL can help determine the burden of preventable disease, injuries, and disabilities, and it can provide valuable new insights into the relationships between HRQOL and risk factors. Measuring HRQOL will help monitor progress in achieving the nation's health objectives.