Impact of Hypertension on the Quality Of Life among Patients Attending Two Palestinian Communities

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Abstract The aim of this study was to evaluate the quality of life among hypertensive patients attending governmental and UNRWA clinics. It used a descriptive analytical cross sectional design, the study sample included 340 subjects aged between 40 – 71 years old, and who had hypertension at least for two years. Two settings were chosen randomly one belong to the government and the other belong to UNRWA. Subjects were recruited by using non probability convenient sample method, 170 subjects from each setting comprising 85 males and 85 females. Subjects were told to sign consent in order to participate in the study. A face to face structured interview was used to collect data from the participants by using demographic information sheet and the WHOQOL – BREEF questionnaire. Results of the study revealed that, the percentage of the total scores of the QOL among the whole study sample 65.63%, the highest domain was the social at (70.14%), and the lowest one was the environmental at (62.40%). Demographic characteristics including, age, sex, marital status, educational attainment, duration of disease, monthly income, family size, working status and clinic being visited, was statistically significant except for some domains pertaining to some groups. Physical, psychological and social domains were lower in the group of monthly income 3000NIS and above in comparison with the group of monthly income 2001 – 3000NIS at level of significance (f = 12.51, 15.85, 13.61) respectively. In regard to marital status psychological and social domains were higher in the married group in comparison with divorced group, but the physicals domain in the divorced group was better than that in the married group at level of significance (f = 19.55, 18.22, 24.22) respectively. Family size and clinic being visited, showed no statistical significance, except for the social domain in favor of subjects visiting the governmental clinic, statistical significance at (t =2.19; df =338; p<0.05). As a matter of fact, health care providers and decision makers should consider the results of this study to contribute in the promotion of health care services provided to hypertensive patients to reduce their suffering, prevent and delay future complications as well as helping them to have and enjoy a better quality of life.

ملخص هدفت هذه الدراسة الوصفية التحليلية القطعية إلى تقييم جودة الحياة عند مرضى ضغط الدم المسجلين في عيادات الحكومة والوكالة ، حيث أن تقيم جودة الحياة عند هؤلاء الأفراد يمثل تقيما شاملا للبعد الجسماني ، النفسي، الاجتماعي و كذلك البعد البيئي، كما أنة يعتبر معاينة لمدي رضى هؤلاء الأفراد عن الخدمات الصحية المقدمةلهم ،

حيث تم اختيار عيادة وكالة وعيادة حكومة عن طريق العينة العشوائية ، ولقد تم اختيار الأفراد المشاركين في الدراسة بواسطة استخدام نظام العينة المتاحة أو الملائمة داخل العيادة المحددة لإجراء عملية جمع المعلومات بالشكل السليم . لقد شملت الدراسة 340 فرد تتراوح أعمارهم ما بين 40 إلى 71 سنة حيث تم اختيار 170 فرد من كل عيادة ،85 ذكر و 85 أنثى ، يعانون من مرض ضغط الدم لمدة عامين فأكثر، لقد تم شرح أهداف الدراسة للمشاركين وتم اخذ الموافقة منهم على المشاركة في الدراسة بتوقيع كل فرد على إقرار بالموافقة على المشاركة في الدراسة، لقد أجريت المقابلات الانفرادية من خلال مقابلة شخصية وجها لوجه وذلك باستخدام استبانه البيانات الشخصية وكذلك استبانه تقييم جودة الحياة. لقد أظهرت نتائج هذه الدراسة أن معدل جودة الحياة بين جميع أفراد العينة الدراسية كان 65.63% ، ولقد حصل البعد الاجتماعي على أعلى نسبة وهى 70.14% أما البعد البيئي فقد حصل على اقل نسبة وهى 62.40%. بالنسبة للعوامل الديمغرافية والتي تشتمل على (العمر، الجنس ، الحالة الاجتماعية ، التحصيل الدراسي، عدد سنوات المرض ، الدخل الشهري ، عدد أفراد الأسرة ، حالة العمل ، العيادة التي يزورها المريض). أظهرت دلالة إحصائية ما عدا بعض الأبعاد عند بعض المجموعات مثل البعد الجسماني ، والنفسي والاجتماعي عند ذوى الدخل 3000 شيكل فأكثر اقل منها عند ذوى الدخل الذي يتراوح بين 2100 إلى 3000 شيكل ، حيث كانت الدلالة الإحصائية (f = 12.51,15.85,13.61) على التوالي .
بالنسبة للحالة الاجتماعية لقد اظهرا البعدين النفسي والاجتماعي عند المتزوجين معدلا أعلى بالمقارنة مع المطلقين ، ولكن المجال الجسماني اظهر معدلا أعلى منه بالمقارنة مع المتزوجين حيث كانت الدلالة الإحصائية (f = 19.55,18.22,24.22) على التوالي . أما بالنسبة لعدد أفراد الأسرة والعيادة التي يزورها المريض فلم يكن لها اى دلالات إحصائية ما عدا البعد الاجتماعي حيث كان لصالح مرضى عيادة الحكومة حيث كانت الدلالة الإحصائية (t = 2.19-df = 338p<0.05) توصى الدراسة مقدمي الخدمات الصحية وصانعي القرار أن يأخذوا مثل تلك النتائج بعين الاعتبار من اجل المساهمة في تطوير الخدمات الصحية ، المقدمة لمرضى ارتفاع ضغط الدم من اجل تخفيف معاناتهم والحلول دون حدوث مضاعفات مستقبلية وكذلك مساعدتهم في التمتع بحياة ذات جودة أفضل .

Introduction:

Non-communicable diseases (NCD) introduce a considerable burden and challenge to health globally for the present time and in the future, they caused 59% of deaths and 47% of the global burden of disease in 2002. These diseases place a heavy burden on people's health, health care systems as will as threatening economical and social development NCDs are responsible for at least 40% of all deaths in the developing world countries including, 40% in India, 84% in the former Soviet Union and 23% in the sub-Sahara Africa, and 75% in the industrialized countries.

Predictions for the future based on current trends, stats that, the global burden of NCDs will increase to 73% of all deaths and 60% of disease burden by the year 2020. They comprise a large group of diseases such as, diabetes mellitus, chronic respiratory disease, cancer and cardiovascular diseases including, hypertension, heart disease and stroke. These diseases

are influenced by many risk factors (high salt diet, high fat diet, high sugar diet, alcohol intake, physical inactivity and non compliance to medical treatment and smoking) which, are all connected to the life style of the people (WHO, 2001). Cardiovascular diseases (CVDs) have emerged as the leading cause of death in most regions of the world, causing 30% of all deaths in 1998. Where deaths among men and women is were 28% and 34% respectively (WHO, 1999).

Deaths under the age of 70 years old in the developing countries due to CVD were 46.7% compared to 22.7% in the developed countries in 1999.In comparison of data from 1999, to projections for 2020, based on socio-demographic and economic models, the burden of CVD will rise all over the world .According to DALYs (attributable disability adjusted life years), life losses related to CVD will increase to 55% between 1999 and 2020, in the developing countries. In India deaths due to CVD are expected to rise from 24.2% in 1999 to 41.8% of the total deaths in 2020. Thus, the increasing burden of CVD would be mostly borne by the developing countries in the next two decades (Reddy, 2001).

Cardiovascular diseases caused more than half of all deaths in Europe in 2020.

Over the past 30 years, mortality from CVD of all ages has been declining steadily in Western Europe. On the other hand, there has been general increase in mortality in the newly dependent states reaching the peak in 1994.

In 2000, the average numbers for CVD mortality of all ages in the newly dependent states, of the former Soviet Union, were three times higher than those in Western Europe (WHO, 2001). The high burden of midlife deaths would continue to prevail the developing countries, as the CVD epidemics continue to take a higher share of the global disease burden. It has been projected that, 6.4 million deaths will occur due to CVD in the developing countries in the age group of 30-69 by the year 2020.

These projections may result from CVD risk factors which influenced by the combined effects of industrlization, urbanization, and globalization. In Palestine, CVDs, represents the leading cause of death in the year 2004, constituting 56.8% with a rate of 54.4 per 100,000 populations.

In the year 2004, 3481 persons have died from CVDs between them (1781males and 1700 females), with a proportion of 33.6% of the total deaths, with a rate of 95.7/100,000 population. This shows that, mortality among males is higher than females (51.1% in males Vs 48.9% in females), (MOH, 2004).

One of the most serious diseases of NCD's is hypertension which is called, the silent killer Hypertension was defined according to World Health Organization (WHO) standardized criteria as systolic BP =>140 mmHg and/or diastolic BP=> 90 mmHg and/or the use of antihypertensive medication (WHO, 1999).

The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of high blood pressure (JNC7) in 2003, defined a blood pressure of <120/<80mmHg as normal; 120-139/80-89mmHg as pre-hypertension.. The JNC7, introduced the new category, pre-hypertension into the categorization of the blood pressure levels to emphasize the growing awareness that persons whose blood pressure begins to rise above 120/80mmHg are likely to develop definitely hypertension.

Therefore, this committee hopes that, health care providers will encourage people with blood pressure in the pre-hypertension stage to begin life style modifications such as diet changes and exercise. It also, recommends that persons with hypertension must be treated with medications and be evaluated by their doctor nearly every month until their blood pressure get to normal and about every 3to 6 months thereafter. People with higher blood pressure >160/>100, need to be evaluated more frequently. Hypertension has been classified into two categories; primary hypertension and secondary hypertension. In primary hypertension the cause of blood pressure elevation is un-identifiable. Between 21% and 36% of the adult population of the United States of America has hypertension between 90% and 95% out of this population, have primary hypertension. The remaining 5% to 10% of this group has high blood pressure related to a specific cause. Secondary Hypertension is high blood pressure from identified cause such as, Sleep Apnea, Drug-induced or related cause, chronic kidney disease, and Cushing's disease. Hypertension is a symptom free disease because; people who have it are often symptomless. In a national survey that was conducted in (1999 to 2000), 31% of people who had blood pressure exceeding 140/90 mmHg were unaware of their elevated blood pressure.

For hypertension to occur there must be a change in one or more factors affecting peripheral resistance or cardiac output. In addition, there must also be a problem with the control system that monitors or regulates pressure. Single gene mutations have been identified for a few rare types of hypertension, but many types of high blood pressure are due to mutations in more than one gene (Smeltzer & Brenda, 2004).

The prevalence of hypertension in some countries in the region, in south western Saudi Arabia was 10.6% in men and 11.4%in women (Aboulfotouh,M. Abu-Zeid,H. 1996). In Tunisia it was 28.4%in women and

30.0% in men (Ghannem,H. Hadj Fredj, A.1997). In Palestine hypertension constitutes 17.4% of cardiovascular diseases with a rate of 16.6 per 100,000 population, hypertension disease mortality is the seventh leading cause of deaths in the total population with 5.9% and it represents 4.1%of males deaths, while, it was the fourth leading cause of deaths in females with 8.3%. Hypertension is the fifth leading cause of cardiovascular disease deaths; with 17.4% of the total cardiovascular mortality, with a rate of 16.6 per 100,000. 1n 2004, mortality rate per 100,000 was 20.1, for females and 13.2, for males in comparison with 35.8 among females and 24.6 among males in 2000.the annual average specific mortality rate from hypertension for 100,000 population was 17.8 for males and 23.3 for females in the last five years (MOH, 2004).

Records of registered hypertensive patients, in UNRWA clinics, by age and sex in Gaza Strip, in the year 2003 show, males 3805, females 9568, with total number 13373 subjects. Distribution of registered hypertensive patients in UNRWA clinics, by age in Gaza Strip, as follow, <20years old 95, 20-29 years old, 1489, 40-59years old, 6120, >60 years old, 5669. The rate of new cases of hypertension per 100,000 populations among registered refugee population in Gaza Strip is 289.9 (M.O.H, 2003). Quality of life is a common concept in the field of health in general as will as health literature. Having improved quality of life is seen as the desired out come of health care provision. Assessment of Quality of life can reveal people in need for support and care, despite the absence of a diagnosable disease. Looking to quality of life from a health promotion or a disease prevention point of view, it can be seen as a health risk indicator, either physical or psychological as long as there is no treatment or any kind of care (Raphael et al., 1996).

The research on quality of life has been emphasized by the United Nations Education Science Culture Organization (UNESCO, 1977). With projects to develop research designs and instruments that are likely to stimulate QOL research in regions that have no research attempters and traditions in this field. Such research studies take into consideration the fact that, individuals and groups not only experience quality but also participating in creating their life quality. Research studies on people managing their chronic disease should be policy- oriented and should provide information and clarifications to the public as will as to policy makers (Milbrath, 1979).

WHO has developed a quality of life assessment tool called World Health Organization Quality of Life Questionnaire- short version (WHOQOL-BREF). This initiative has emerged from the need to a genuine international measure of quality of life and a commitment to the on going promotion of a

holistic approach to health and health care profession.
The dramatic increase of death in average age has brought the attention that, longevity should be accompanied with improvements in health-related quality of life (HRQOL). Some researchers indicated that, increasing life expectancy will lead to an increase in the proportion of people living in poor health with the consequent burden on society and health care services (Manuel and Schultz, 2004).
The World Health Organization (WHO) has summarized these concerns, stating that, "adding years to life is an empty victory without adding life to years"(WHO, 1998).
The Quality of Life Research Unit in the Department of Public Health Sciences, University of Toronto stated that: "The ultimate goal of quality of life study and its subsequent application to people's lives is to enable people to live quality lives; lives that are both meaningful and enjoyable" (Renwick, 2002).

Methodology:
The aim of this study was to evaluate the impact of hypertension on QOL among patients attending Al Rimal and Shake Radwan clinics in Gaza city.
The researcher has used a descriptive analytical cross sectional design to conduct this study. Which focused on the QOL including its different domains among hypertensive patients in two different settings providing almost the same services under different rules and regulations, bearing in mind comparison between the two settings will enrich the study. The settings of this study were chosen randomly, comprising two clinics, Al Shake Radwan as a governmental clinic, and al Rimal as UNRWA clinic.
Study population included 2500 subjects; hypertensive patients who met the eligibility criteria. in both clinics. Study sample included a total of 340 subjects distributed as 170 subject for each clinic, in which 85 male and 85 female matched by age and sex, where chosen by using a non-probability convenient sample.

Eligibility criteria:
Inclusion criteria:

1. Hypertensive patient aged between 40 to 71years old.
2. Hypertension has been diagnosed and confirmed by a physician and subject has been under medical follow up and treatment at least for two years.
3. Subjects have no history of any other diseases.
4. Subjects can communicate verbally with the researcher.

5. Subjects have time and willing to participate in the study.

Exclusion criteria:

1. Subjects less than 40 and over 71 years old.
2. Subjects with history of other disease.
3. Subjects have been under medical follow up for less than two years.
4. Subjects who refuse to participate in the study.

After obtaining the necessary permissions from the concerned authorities to conduct the study, the researcher has met with the physicians and the nurses in charge of both Al Rimal and shake Radwan clinics, explained to them the purpose of the study and requested the needed assistance from their side in recruiting the subjects. The subjects who met the inclusion criteria were selected as potential participants for the study. Method, purpose, special objectives of the study were explained carefully to each eligible subject.

Upon agreement of the subject to participate in the study, they were assured that they could withdraw from the study at any time they wish as well as they would not be identified in the report of the study, consent form was read to them at that time.

In this study, a structured face to face interview was used to collect data from the subjects by the researcher himself. According to lofland, intensive interview aims to discover the participant's experience of a particular situation. It further allows the researcher an opportunity to pursue the topics of interest in depth as well as to probe more which may arise during the interview, and to clarify misinterpretations which may occur (lofland, 1984).

Pilot testing:

Data collection instruments, the demographic sheet and the QOL questionnaire were both tested by 20 subjects from both clinics; all those who were pilot tested were excluded from the study. The goals of the pilot study were to assess the adequacy of the data collection plan, to know whether respondents from all groups understand the questions on the same way, to identify any parts of the instrument find objectionable or culturally incongruent. Thus, revision and refinements have been done to minimize the problems which may be raised during data collection.

After data collection, data was entered and analyzed by using the Statistical Package for Social Sciences (SPSS. Version 8). The descriptive statistical techniques such as frequency distribution, independent t-test and one way

ANOVA were used, the p-value of less than 0.05 was considered statistically significant.

Instruments of data collection:
Two data collection instruments were used; the demographic information sheet and quality of life questionnaire. The demographic information sheet has covered the following areas of interest; demographic data including, age, gender, marital status, place of residency, and educational level, socioeconomic status including, occupation, income and number of dependents sponsored by the participant and health profile including: duration of the disease, history of any other diseases and type of treatment.
On the other hand, the quality of life questionnaire (WHOQOL-BREF), contains a total of 26 questions to provide a broad and comprehensive assessment, of the overall quality of Life, general health and as well as, providing a new perception on the disease by focusing on the individual's own views of their well being. This kind of instrument is not only inquiring about the functioning of people with hypertension across a range of areas but also inquiring how those people are satisfied with their functioning under the effect of medical treatment (WHO, 1996).

Ethical considerations:
Formal approval was obtained from the concerned authorities to conduct the study at UNRWA and MOH clinics. Subjects who agreed to participate in the study were asked to singe the consent form. The participants and their families were assured that their names and responses would be confidential. All participants have been informed that, their participation is entirely voluntary, and even after the interview begins they can refuse to answer any specific question and they have the right to terminate the interview at any time. They have been also informed that, neither their participation or non participation or refusal to answer any question will not have any effect on health care services that they or any member of their families may receive from UNRWA or MOH.

Results and Discussion

The data collected in this study provides a great deal of information on hypertensive patients, and quality of life they are living, as well as, their experience with the health care facilities they are visiting for medical advice and treatment In this chapter the researcher tries to present the core results that includes, the socio-demographic characteristics of the study sample as well as, the evaluation of the quality of life and the related variables

affecting, by using descriptive analysis to provide summary of the study sample characteristics, frequency distributions, as well as, presentation of data in tables and graphs.

Table (5.1) Distribution of the sample according to sex

Sex	N	%
Males	170	50.0
Females	170	50.0
Total	340	100.0

As shown in table (5.1), the total number of subjects selected for the study was 340 subjects of hypertensive patients from governmental and UNRWA clinics. The total number of males was 170 (50.0 %); and the total number of females was 170 (50.0%).

Table (5.2) Independent t-test comparing means of quality of life according to sex

Variable	Males N = 170		Females N = 170		T- value df = 338
	Mean	SD	Mean	SD	
Physical domain	24.71	5.117	22.61	6.273	*** 3.38
Psychological domain	19.84	3.732	18.72	3.109	** 3.01
Social domain	10.80	2.179	10.23	1.682	** 2.70
Environmental domain	25.65	4.202	24.27	5.199	** 2.69
Global value	6.84	1.667	6.92	3.474	0.26
Total scores of Quality of life	87.87	13.890	82.77	14.181	*** 3.35

*p< 0.05 **p< 0.01 ***p< 0.001

In order to clarify the difference in quality if life among hypertensive patients independent t- test was performed The result in table (5.2) shows that, there is a significant differences between the physical domain and total scores of quality of life according to sex with an actual probability ($t = 3.38, 3.35$; $df= 338$; $P<0.001$) respectively toward males. It also shows a significant differences between the psychological, social and environmental domain according to sex with an actual probability ($t = 3.01, 2.70, 2.69$; $df= 338$; $P<0.01$) respectively toward males. While the global value was not significant according to sex ($t = 0.26$; $df= 338$; $P> 0.05$, NS.).

This result indicates that males enjoy a better quality of life than female do, and this is obvious in the whole domains of quality of life, which is attributed to fact that males have the opportunity to go out visiting friends, the vast majority of males work and earn money, even if they are not working they are keeping the money which represents to them a source of power and satisfaction. Males are also spending too much time out side the house which is in most times is the source of tension and anxiety, which will improve their quality of life. On the contrary female stay most of time at home taking care of the children looking after every single detail of their houses, which represents a source of tiredness and worry, which will be reflected negatively on their quality of life. The study which conducted by Klocek and Kawecka, in (2003), agrees with the aforementioned results, which means that, most societies are all alike no matter where they are in Europe, Africa, Asia, or America, males dominate the family as well as the society.

Quality of life and age:

Age is an important variable because, it's included in all areas of research studies. It definitely affects quality of life therefore, it should be studied. For the purpose of this study age was categorized into three categories (40-49), (50-59), (60 and more)

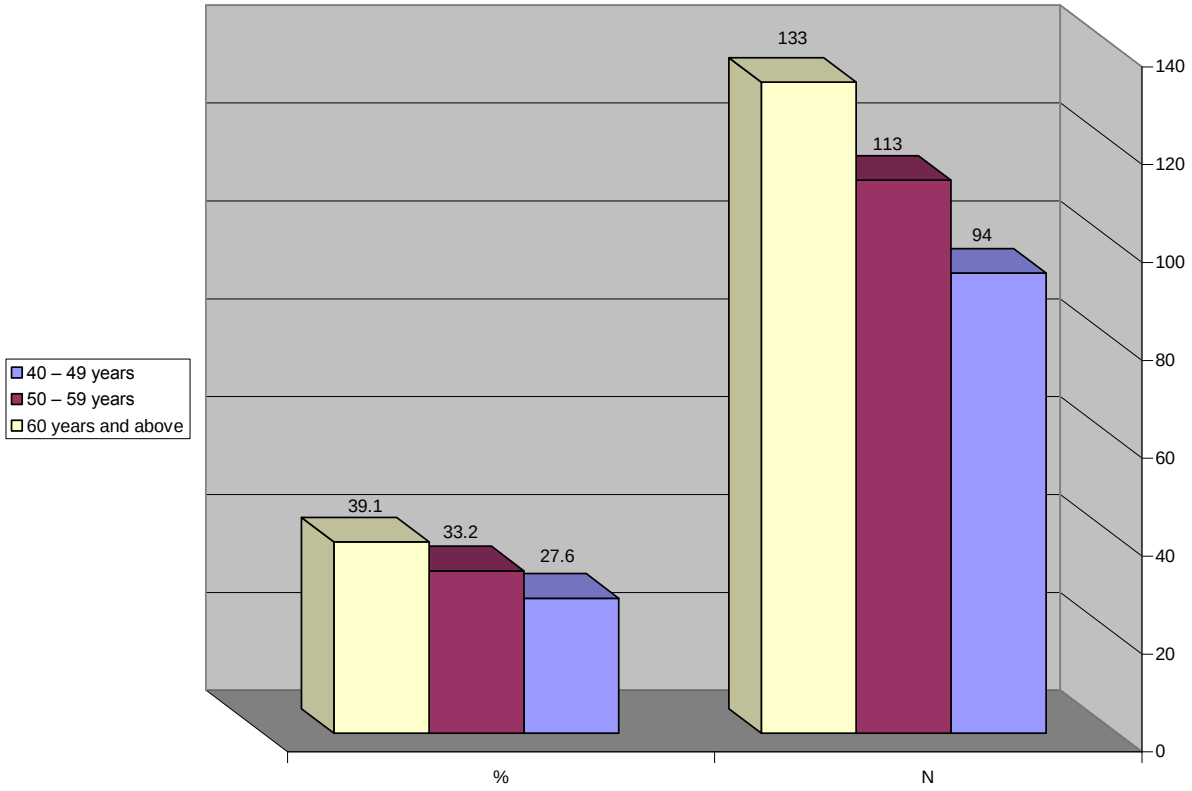

Figure (5. 1) Distribution of the sample according to age

Figure (5.1) shows that; 94 subjects of the sample are aged between 40 – 49 years old which represents (27.6%), 113 subjects are aged between 50 – 59 years old which represents (33.2%), and 133 are aged 60 years old and above which represents (39.1%). Its obvious that, about one third of the sample are aged between 40-49 years old, and two third of sample are aged 50 years old and above, which mean in this range of age most people may get hypertension.

Table (5.3) Means of quality of life according to age

Variable	40 - 49 years (N= 94)	50 - 59 years (N= 113)	60 and above (N= 133)
Physical domain	26.37	24.63	20.93
Psychological domain	20.20	19.92	18.09
Social domain	11.23	10.67	9.88
Environmental domain	25.19	26.14	23.79
Global value	7.06	7.30	6.40
Total scores of Quality of life	90.06	88.68	79.11

As shown in table (5.3) physical, psychological and social domains were better in age group (40 – 49) years old in comparison with the other age groups. But the environmental domain was better in the age group (50 – 59) years old. It also indicates that, the total scores of quality of life are higher in age group (40 – 49) in comparison with the other age groups.

Table (5.4) One-way ANOVA comparing quality of life according to age

Variables	Source of variance	Sum of Squares	Df	Mean Square	F- value
Physical domain	Between Groups	1788.961	2	894.481	*** 31.19
	Within Groups	9664.483	337	28.678	
	Total	11453.44	339		
Psychological domain	Between Groups	315.816	2	157.908	*** 14.08
	Within Groups	3779.510	337	11.215	
	Total	4095.326	339		
Social domain	Between Groups	103.812	2	51.906	*** 14.51
	Within Groups	1205.044	337	3.576	
	Total	1308.856	339		
Environmental domain	Between Groups	342.696	2	171.348	*** 7.83
	Within Groups	7373.807	337	21.881	
	Total	7716.503	339		
Global value	Between Groups	53.064	2	26.532	* 3.63
	Within Groups	2457.462	337	7.292	
	Total	2510.526	339		
Total scores of Quality of life	Between Groups	8516.600	2	4258.300	*** 23.80
	Within Groups	60289.45	337	178.900	
	Total	68806.05	339		

*p< 0.05 **p< 0.01 ***p< 0.001

One-Way ANOVA analysis was used to study quality of life according to

the age. As shown in table (5.4); the results show that, there is a significant difference between physical, psychological, social, and environmental domains and the total scores of quality of life according to the age, at levels of significant ($f = 31.19, 14.08, 14.51, 7.83, 23.80$; $P< 0.001$) respectively. While the Global value is significant according to age at the level ($f = 3.63$; $P< 0.05$).

Post– hoc analysis according to scheffee statistical test was done presenting that, there is a negative relationship between the quality of life and age. (i.e. as patients getting older their quality of life getting lower). Which means that, QOL is in favor of the age group (40 – 49) years old?

Of course, the above results are logical because, as people getting older after 40 years old are subjected to all types of diseases especially chronic diseases such as hypertension and diabetes, so, when patient gets hypertension in the early forties he can resist the disease and his response to the medication will be positive with no or at least very mild side effects therefore, he can enjoy a good quality of life. On the other hand when he gets older he will be weaker with low resistant and more complications as well as more side effects which will lead to deterioration of his quality of life.

There is some literature that agrees with the results being mentioned. A study was conducted in china by Li and associates in (2005) agree with the obtained results, moreover another study which was conducted in the USA by Erickson and collogues in (2001), also agrees with the results. Its obvious that, its like a rule patients all over the world when they getting old they need some one to help them in their daily life, they quit working, they get lack of money and they need more medication, so as a result their quality of life decreases.

Table (5.5) Distribution of sample according to clinic being visited

Clinic visited	N	%
Government	170	50.0
UNRWA	170	50.0
Total	340	100.0

Its clear from table (5.5); that 170 subjects were visiting governmental clinic (50.0%) and 170 subjects were visiting UNRWA clinic (50.0%). This means that, equal numbers of subjects were taken from both clinics to match between age and sex to control confounding variables.

Table (5.6) Independent t-test comparing means of quality of life according to clinic

Variable	**Government** N = 170		**UNRWA** N = 170		T- value df = 338
	Mean	SD	Mean	SD	
Physical domain	23.92	5.362	23.41	6.235	0.81
Psychological domain	19.20	3.554	19.36	3.403	0.42
Social domain	10.75	2.043	10.28	1.860	* 2.19
Environmental domain	25.18	4.574	24.73	4.963	0.87
Global value	6.88	1.530	6.88	3.537	0.02
Total scores of Quality of life	85.95	14.063	84.68	14.441	0.82

*p< 0.05 **p< 0.01 ***p< 0.001

In order to test quality of life among the hypertensive patients according to the clinic they visit independent T- test was performed. As table (5.6) reveals; there is no significant differences between levels of total scores of quality of life and most of its domains according to clinics that patients visited (t = 0.81, 0.42, 0.87, 0.02, 0.82; P> 0.05). While there is a significant differences between levels of social domain according to clinic being visited

by the patients at (t= 2.19; df= 338; p< 0.05) in favor of patients who visited governmental clinics. It seems that the variable of the clinic being visited by the patients is not important since it shows no significant result, in the total quality of life and most of its domains except for the social domain which shows slight significance.
This indicates that, health services being provided in both the UNRWA, and governmental clinics are almost the same, so the only variable that affects the quality of life among the hypertensive patients from UNRWA, and governmental clinics is the disease it self (hypertension).
This also point out that, patients are satisfied with the services being provided by the staff in both clinics, and that gives a good sign about the standard of health care services being provided by the UNRWA, and the MOH. Concerning the social domain which in favor of patients who visit the governmental clinic it looks like that, those patients enjoy a better social atmosphere within their families as well as outside their families, than those who visit the UNRWA clinic.

Conclusion:

Hypertension represents a major threat for millions of people around the world, and it's a cause for growing public health concern in most countries including Palestine. Hypertension is now a leading cause of death, disability and a highly health care cost, which must persuade all health authorities to cope with this challenge.
Hypertension as a serous public health problem requires changes to the structure of health care delivery in terms of, well resourced interventions, effective coordination between all levels of the health organization, health care agencies, multidisciplinary health care teams as well as patient's advocacy group.
Although, hypertension cannot be cured, it can be controlled. Its effects on QOL can be minimized and proper management can prevent or delay its long term complications. It worth mention that, hypertension management is more of a psychological problem than of a biological one, particularly when behaviors, attitudes and circumstances of the patient are the key determinants for achieving medical control which leads to improvement of the quality of their lives. This study has approved that hypertension and its complications were associated with more substantial reduction not only in the physical abilities of the patients but also in their psychological wellness.

This study has used a quantitative measure which provided an important assessment of the QOL among patients in UNRWA and governmental

clinics, it also gave rich and meaningful information about the patient's experience with hypertension, moreover it provided a detailed and extensive understanding of how the disease with scarce resources affected their QOL, since the effective management of hypertension is largely dependant on the patient himself. It's so important to help hypertensive patients to minimize their psychological distress and unnecessary disturbances of their QOL.

This descriptive analytical cross sectional study was conducted to evaluate the QOL among patients attending UNRWA and governmental clinics in Gaza city. A convenient sample of 340 subjects aged between 40- 71 years old were recruited from two settings UNRWA and government. Data was collected by using demographic information sheet and the WHOQOL-BREEF questionnaire.

Results revealed that, about one third of the sample are (40-49) years old, and the rest two third are aged 50 years and above. According to duration of disease most of the sample have been suffering from 2 – 5 years 168 subjects (49.4%), 103 subjects (30.3%) from 6-10 years, 42 subjects (12.4%) from 11-15 years and 27 subjects (7.9%) 16 years and above, distribution of the sample by educational attainment shows that, most of the study sample were illiterate (25.3%) and had hypertension, the vast majority of the sample were very low income 1200NIS and less (68.5%), the percentage of unemployment was the greatest among the sample (76.5%), subjects have extended families 8 children and above were the majority among the study sample (45.3%), married subjects were the majority among the sample (83.2%), subjects from UNRWA and government clinics were 170 subjects from each clinic (50%).

The findings of this study also revealed that, total scores of QOL among hypertensive patients as high as 65.63%, and the highest domain was the social one at 70.14%while the lowest one was the environmental at 62.40%. In regard to sex, results revealed that, males enjoyed a better QOL than females especially the physical domain. Concerning duration of disease the results indicated that, as duration of disease increases QOL decreases. Findings of the study indicated that, as the subject getting older his QOL getting lower. In respect to educational attainment the results revealed that, QOL is higher among literate subjects than illiterate. Moreover, the findings asserted that, as monthly income increase QOL improves, except for physical and social domains. Family size was not statically significant for QOL.

QOL was higher among married and divorced than widowed subjects, showing that, the physical domain was in favor of the divorced but, the Psychological and Social domains were in favor of the married patients. The

results also revealed that, work status was statically significant in relation to QOL in favor of working subjects.
Furthermore, the study revealed that, the clinics being visited by the subjects were not statically significant in relation to QOL except for the social domain which was in favor of the subjects visiting the governmental clinic.
However, within this overall study a picture of relatively positive indicator of the QOL among the study sample, except for some domains which must highlight the need for some reforms concerning the areas where QOL has shown impairment.

Recommendations:
As a matter of fact, health services provided at both governmental and UNRWA facilities should respond to client's demands and perspectives, in order to enhance client's involvement in the treatment process as well to prevent or at least to minimize suffering and further complications. Furthermore, study results that helping developing in depth understanding of issues that may influence subject's overall health as well as their QOL, therefore, here are some recommendations that should be considered.

- To pay more attention to illiterate subjects in terms of treating them as special need subjects.
- To find work opportunities for those who are not working in order to reduce their hardship.
- To focus on the strategy of prevention rather than treatment in order to save health complications as well as social and financial burdens.
- To encourage people to introduce life style modifications in terms of physical activity, diet, recreation.
- To enhance public awareness about health issues through the media, publications, educational sessions and lectures.
- Ongoing evaluation of the quality and effectiveness of patient's care and management.

Recommendations for future research studies:

1. The relationship between quality of life and type of work.
2. Noncompliance to treatment regimen and its effect on the quality of life.
3. The relationship between life style and quality of life.
4. Prevalence of hypertension among people under 40 years of age, and its effect on their quality of life.

5. Quality of life among hypertensive people with another disease.
6. The impact of hypertensive medications on the quality of life among hypertensive patients.
7. The impact of gestational hypertension on the quality of life among pregnant women.

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