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Elderly Attending General Practice Clinics in Poor Urban Areas: A Cross-Sectional Study in Jordan

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Abstract
This study aimed at analyzing the level of awareness and satisfaction among elder patients attending general practice clinics in poor urban areas in Jordan. The researchers adopted the descriptive methodology by using a questionnaire as a study tool, consisting of two dimensions and ten paragraphs, and was applied to a sample of 726 elderly patients. The study reached a number of results, the most important of which was the high level of awareness among the elderly about the importance of the role of general practice clinics in poor urban areas in Jordan. The researchers recommended to educate elder patients about the importance of general practice clinics, as they provide health services and health care in poor areas of Jordan, and to encourage them to exploit the medical services provided by the general practice clinics in poor areas of Jordan in the correct manner.
Keywords: Elder patients, general practice clinics, poor urban areas, Jordan

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1.1 Introduction

Health systems are undergoing rapid change and the requirements for conforming to the new challenges of changing demographics, disease patterns, emerging and reemerging diseases coupled with rising costs of health care delivery have forced a comprehensive review of health systems and their functioning. As the countries examine their health systems in greater depth to adjust to new demands, the number and complexities of problems identified increases. Some health systems fail to provide the essential services and some are creaking under the strain of inefficient provision of services. A number of issues including governance in health, financing of health care, human resource imbalances, access and quality of health services, along with the impacts of reforms in other areas of the economies significantly affect the ability of health systems to deliver (WHO, 2017).

Decision-makers at all levels need to appraise the variation in health system performance, identify factors that influence it and articulate policies that will achieve better results in a variety of settings. Meaningful, comparable information on health system performance, and on key factors that explain performance variation, can strengthen the scientific foundations of health policy at international and national levels. Comparison of performance across countries and over time can provide important insights into policies that improve performance and those that do not (Whitworth, Kokwaro, Kinyanjui, Snewin, Tanner, Walport & Sewankambo, 2008).

Jordan has one of the most modern health care infrastructures in the Middle East. Jordan's health system is a complex amalgam of three major sectors: Public, private, and donors. The public sector consists of two major public programs that finance as well as deliver care: the Ministry of Health (MOH) and Royal Medical Services (RMS). Other smaller public programs include several university-based programs, such as Jordan University Hospital (JUH) in Amman and King Abdullah Hospital (KAH) in Irbid (Almajali, Masa'deh & Tarhini, 2016).

General practice is the most cost effective and efficient part of the Jordanian health service, therefore, the concept of poverty is defined as "the inability to Jordan used development planning process as a achieve a minimum standard of living". Given the absolute means to address the weaknesses and face challenges in the health sector. Despite the achievement of economic development which process of reducing poverty in a country and in a moment is reflected in human well-being, poverty is increasing and is determined as much as it is determined by a growth rate rates of unemployment and malnutrition are also of population's income on average and by changing in the increasing. Poverty has become of the most serious social distribution of income. In fact,

the weak growth and economic phenomena, the community experiences weakness of mechanisms of the equitable income and become as a growing feature threatening economic, distribution leads to increase the level of poverty (Al Rahamneh & Al Habees, 2012).

Patients are at the centre of the healthcare delivery model and their evaluations are therefore the most direct assessment of accessibility and quality of healthcare services provided (Keating & Ayanian, 2003).

Patient satisfaction is associated with continuity of care, better compliance and health outcomes. Patient evaluations are advantageous in terms of cost and time; they are rapid and do not depend on medical records so the quality of the data is not compromised. Patient evaluation is an important component of the evaluation of quality of care (Sultan, Khuwaja, Kausar & Nanji, 2012).

The general Health Policy is set by the High Health Council that represents all health care providers .The Government of Jordan is committed to making health services available and accessible to all. The national health strategy is aimed at creating a comprehensive health care system, utilizing both public and private service providers covering all levels of care and improving the quality of health services by implementing a national health services accreditation program. As part of the Socio-Economic Transformation Program (SETP), the government is in the process of expanding and improving health care provision to the poor. This includes expanding health insurance coverage from 60% in 2014 to 80% by the end of 2016, upgrading primary healthcare facilities, improving hospital administration to speed up admissions and reduce duplication of services and other waste (WHO, 2016).

1.2 Problem statement and questions of the study

General practice provides primary, continuing, comprehensive and coordinated, culturally sensitive, inter-generational holistic health care to individuals and families in their communities. It is underpinned by rigorous scientific medical training and the ability to apply the evidence appropriately in community settings. All these elements place general practice at the centre of an effective primary health care system (Brown, Katherine, Allen, Quach, Chiu & Bialystok, 2010).

The accuracy of the data resources, study tools and sampling are the key success elements for this research, as the elderly attending general practice clinics in poor urban areas in this targeted group is a critical and a sensitive case study as long as we are dealing with a health public sector.

Therefore, the problem of this study lies in its attempt to ensure the quality of care in general practice clinics as an approach to optimizing health system performance by trying to answer the following questions:

1. Is the pursuing improvements in population health of elder people a primarily interest of the health policy makers in Jordan?
2. Does the enhancing of general practice increases the elder patient awareness and satisfaction of care?
3. Does the enhancing of general practice reduce the per capita cost to the health care system in Jordan?
4. Does the enhancing of general practice improves the work life of health care providers in the achievement of the first three aims?

1.2.1 Study hypotheses

In light of the problem of the study, and through its questions, the researchers have adopted the following hypotheses:

1.2.1.1 Major hypothesis

H0: There will be no statistically significant differences at the level of significance ($\alpha = 0.05$) of the awareness and satisfaction of elder patient attending general practice clinics in poor areas in Jordan.

1.2.1.2 Sub- hypotheses:

The ramifications of the major hypothesis are the following sub-hypotheses:

H01: There will be no statistically significant differences at the level of significance ($\alpha = 0.05$) of the awareness of elder patient attending general practice clinics in poor areas in Jordan.

H02: There will be no statistically significant differences at the level of significance ($\alpha = 0.05$) of the satisfaction of elder patient attending general practice clinics in poor areas in Jordan.

1.3 Facts about Jordan

The following table (1) shows the statistical facts about the Jordan population in 2017 according to the latest United Nations estimates.

Table (1): Statistical facts about Jordan

Current population of Jordan	9,531,712
Population equivalent to the total world population	0.1%
Rank number by population	101
Total land area	88,749 Km2
Population density	89 per Km^2
Population in urban areas	84.4 %
Population median age	22.7 years

The elder age groups are: the age group (55-64) years percentage to the total population is 4.3% , and the age group (65 years and over) percentage to the total population is 3.91% . therefore, the total elder percentage is 8.21% which is (738046) individuals, 58% females (428066), and 42% males (309980). And figure (1) shows these distributions.

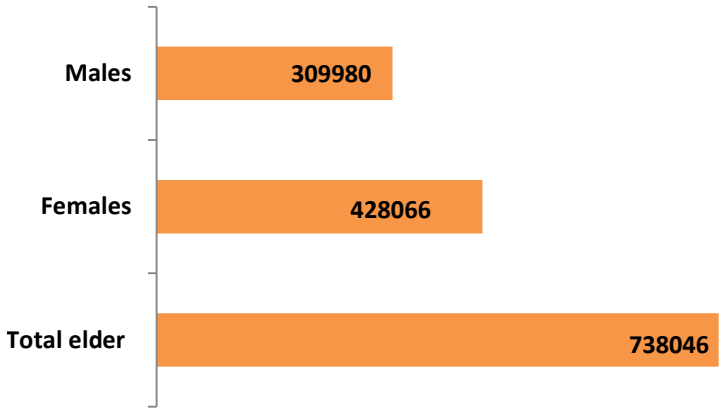

Figure (1): Total elder estimates in Jordan

1.4 Poverty in Jordan

Poverty is defined as the individual's inability to meet the minimum basic needs that guarantee a decent life. The basic needs include: food, clothing, housing, health care, education and transportation. These are the basic needs for the individual to remain alive, maintain his human dignity, and enable him to practice his normal activities. The methodology of measuring poverty in Jordan is the methodology of meeting calorie needs to measure the poverty line and other various indicators. The Household Expenditure and Income Survey (HEIS) is an ideal survey and the main source for measuring poverty indicators in Jordan (Department of Statistics, 2015).

1.6 General practice (GP)

General practitioners (GPs) treat all common medical conditions and refer patients to hospitals and other medical services for urgent and specialist treatment. They focus on the health of the whole person combining physical, psychological and social aspects of care (Lester, Tritter & Sorohan, 2005).

General practitioners have an important role in looking after patients in their homes and within the communities where they live. They are part of a much wider team whose role includes promoting, preventing and initiating treatment. GPs look after patients with chronic illness, with the aim to keep people in their own homes and ensuring they are as well as they possibly can be. GPs are often the first point of contact for anyone with a physical or mental health problem and patients can be at their most anxious. Looking after the whole person - the physical, emotional, social, spiritual, cultural and economic aspects through patient-centered approaches is a vital part of any GP's role. This is becoming more important with terminally ill patients often choosing to stay at home (Davidson, Powers, Hedayat, Tieszen, Kon, Shepard & Ghandi, 2007).

General practice is heterogeneous, ranging from 'traditional', single-handed practitioners to large, multi-partner practices employing a variety of clinical staff. However, as the box opposite shows, there is a distinct trend to larger practices, while the pattern of availability of general practice continues to reflect the inverse care law – that is, the availability of medical care tends to vary inversely with the need of the population served. For example, the number of GPs in areas with the greatest health needs has increased in recent years, but GP levels – weighted for age and need – are still lower in poor areas.

Policy-makers in Jordan have looked to develop new models of care that enable more accessible integrated

services – particularly in poor areas where single-handed GPs struggle to provide the full range of services now expected to be delivered in the community.

General practice is the cornerstone of successful primary health care, which underpins population health outcomes and is key to ensuring we have a high-quality, equitable and sustainable health system into the future. General Practitioners (GPs) are registered specialists in the discipline of general practice recognised by the Jordanian Ministry of Health regulations. Practices in which GPs spend less than half of patient contact hours providing general practice care, and are considered special interest clinics rather than general practices. The primary health care system in Jordan has four main purposes (McKinsey & Company, 2015):

1. To provide the right care at the right time, at the right place, ensuring a healthier population;
2. To provide cost-effective, community-based care, and in doing so appropriately minimize hospital-based care;
3. To act as both an enabler and gateway to other services to ensure they are provided in a timely way but only when needed; and
4. To coordinate care between different health providers and different parts of the health care system, ensuring a seamless, integrated, effective experience for the patient and minimizing costly fragmentation, duplication or gaps in care.

1.7 Methods and producers

1.7.1 The study Sample Geographical distribution

The study sample was selected between January and March 2017from the elderly respondents to general practice clinics from three geographical regions: North, Central and South of Jordan as shown in figure (2). Table (2) shows the distribution of the study sample of the elderly in the three regions by age and gender.

Table (2): Distribution of the study sample of the elderly in the three regions by age and gender

Region	Frequency	Gender		Age category	
		Male	Female	50-60 years	> 60 years
North region	216	120	96	88	128
Central region	320	170	150	187	133
South region	190	81	109	77	113
Total	726	371	355	352	374

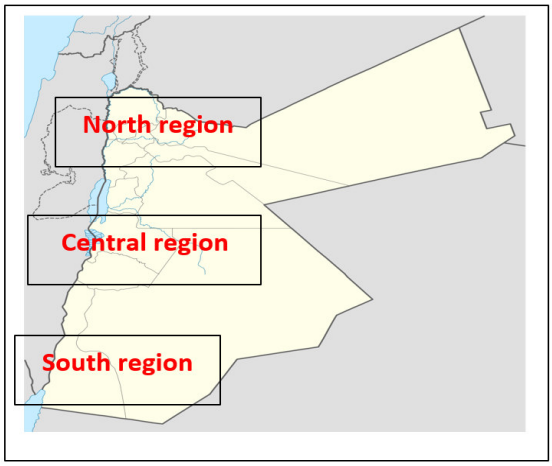

Figure (2): The three regions of the study sample in Jordan

1.7.2 The study tool

The study relied mainly on the self-managed questionnaire designed and prepared by the researcher. After examining the literature and theoretical studies relevant to the subject of this study; whether in periodicals, books or other references, the questionnaire was formed in two parts and as follows:

Part I: Includes information relating to the respondents and their demographic data.

Part II: Includes (10) paragraph related to the measurement of the of conditions of elder patients attending general practise clinics in the three poor regions upon two dimensions. These two dimensions have been identified by the Jordanian Ministry of Health, and these dimensions are:

1. Elder patients awareness of general practise health care, measured in paragraphs (1_ 5).
2. Elder patients satisfaction of general practise health care, measured in paragraphs (6-10).

The questionnaire paragraphs, upon the five-point Likert scale; to measure the variables of the study, and for the purposes of the analysis the weights of the answers were distributed as shown in the table (4-3):

Table (3): The distribution of response options in the questionnaire according to the five-point Likert scale

option	Class
Strongly Agree	5
Agree	4
NA	3
Disagree	2
Strongly Disagree	1

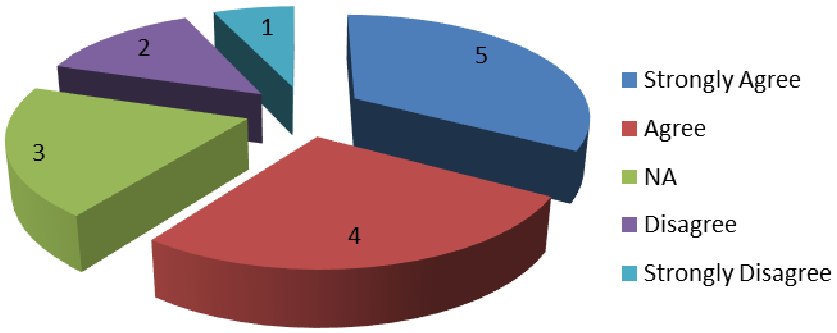

Figure (3): Graphic distribution of the response options in the questionnaire according to the five-point Likert scale.

1.8 Study results and findings

1.8.1 Elder patients awareness of general practise health care

The elder patients awareness of general practise health care variable is measured in paragraphs (1-5), as illustrated in table (4), and that the arithmetical means for answers of the study sample ranged between (4.02 - 3.22), and the standard deviations ranged between (0.778 - 0.811).

All of these arithmetic means shows the approval of the study sample on the paragraphs that measure the elder patients awareness of general practise health care variable, since all the arithmetic means are greater than the default mean.

Also noted that the paragraph, which states "I am aware of what general practise clinics are offering me" had the highest approval grades; as its arithmetic mean was (4.02) and its standard deviation was (0.779), while the paragraph, which states "Attending general practise clinics is costless" had the lowest approval grades; as its arithmetic mean was (3.22) and its standard deviation was (0.813).

Overall, the general average of the arithmetic mean for the answers of the respondents is equivalent to (3.74) and the standard deviation is equivalent to (0.794), which indicates the approval of the respondents upon the scale of these paragraphs was high, and that their attitudes were positive.

Table (4): Arithmetic means and standard deviations for the members of the study sample answers measuring the attitudes towards the elder patients awareness of general practise health care.

NO	Statement	A M	S D	Rank	Grade
1	Attending general practise clinics is costless	3.22	0.813	5	Medium
2	I am aware of what general practise clinics are offering me	4.02	0.779	1	High
3	I am aware of the importance of general practise clinics health care	3.88	0.787	2	High
4	I am aware of the governmental programs to enhance the general practise clinics	3.72	0.803	3	High
5	I am aware of my rights to be treated in the general practise clinics	3.65	0.798	4	Medium
	General average	3.74	0.794	-	High

1.8.2 Elder patients satisfaction of general practise health care

The elder patients satisfaction of general practise health care variable is measured in paragraphs (6-10), as illustrated in table (5), and that the arithmetical means for answers of the study sample ranged between (3.81 - 2.67), and the standard deviations ranged between (0.766 - 0.821).

All of these arithmetic means shows the approval of the study sample on the paragraphs that measure the elder patients awareness of general practise health care variable, since all the arithmetic means are greater than the default mean.

Also noted that the paragraph, which states "I am satisfied of the high level of the doctors in the general practise clinics" had the highest approval grades; as its arithmetic mean was (3.76) and its standard deviation was (0.787), while the paragraph, which states "I am satisfied of the services of the general practise clinics in my region" had the lowest approval grades; as its arithmetic mean was (2.67) and its standard deviation was (0.821).

Overall, the general average of the arithmetic mean for the answers of the respondents is equivalent to (3.52) and the standard deviation is equivalent to (0.791), which indicates the approval of the respondents upon the scale of these paragraphs was medium, and that their attitudes were positive.

Table (5): Arithmetic means and standard deviations for the members of the study sample answers measuring the attitudes towards the elder patients satisfaction of general practise health care.

NO	Statement	A M	S D	Rank	Grade
1	I am satisfied of the cost in the general practise clinics	3.54	0.802	3	Medium
2	I am satisfied of the high level of the staff in the general practise clinics	3.34	0.806	4	Medium
3	I am satisfied of the high level of the nurses in the general practise clinics	3.69	0.801	2	High
4	I am satisfied of the high level of the doctors in the general practise clinics	3.76	0.787	1	High
5	I am satisfied of the services of the general practise clinics in my region	2.67	0.821	5	Medium
	General average	3.52	0.791	-	Medium

1.9 Testing the Study Hypotheses

In order to test the hypotheses of the study, of statistical methods were used with the appropriate tests to the nature of the variables and assumptions, using the simple linear regression and the multiple linear regression analysis so as to put the base of acceptances or rejections the hypothesis as follows:

1. If the calculated value of (T) is higher than the tabulated (T) value at the level of (α = 0.05), the result will be rejection for the null or the zero hypothesis (H0) and the alternative hypothesis (H1) will be accepted, which indicates the statistically significant relationship effect.
2. If the calculated value of (T) is less than the tabulated (T) value at the level of (α = 0.05), the result will be accepted for the null or the zero hypothesis (H0) and the alternative hypothesis (H1) will be rejected, which indicates no statistically significant relationship effect.
3. If the calculated value of (F) is higher than the tabulated (F) value at the level of (α = 0.05), the result will be rejection for the null or the zero hypothesis (H0) and the alternative hypothesis (H1) will be accepted, which indicates the statistically significant relationship effect.
4. If the calculated value of (F) is less than the tabulated (F) value at the level of (α = 0.05), the result will be accepted for the null or the zero hypothesis (H0) and the alternative hypothesis (H1) will be rejected, which indicates no statistically significant relationship effect.

1.9.1 Testing the major hypothesis

H0: There will be no statistically significant differences at the level of significance (α = 0.05) of the awareness and satisfaction of elder patient attending general practice clinics in poor areas in Jordan.

In order to test the major hypothesis, the tow sub-hypotheses must be tested first.

1.9.2 Testing the first sub-hypothesis

H0: There will be no statistically significant differences at the level of significance (α=0.05) of the awareness of elder patient attending general practice clinics in poor areas in Jordan.

It is noted from simple regression analysis results described in table (6) that there is a statistically significant differences at the level of significance (α=0.05) of the awareness of elder patient attending general practice clinics in poor areas in Jordan.

This statistically significant differences at the statistically significant level (α=0.05)**,** as the calculated (T) value is (7.841), which is higher than tabulated (T) value, is in line with the simple regression analysis results that explain the (0.197%) variance.

According to that the null hypothesis (H0) will be rejected and the alternative hypothesis will be accepted, that means there is a statistically significant differences at the level of significance (α=0.05) of the awareness of elder patient attending general practice clinics in poor areas in Jordan.

Table (6): Testing results of the first sub hypothesis

Significant (T)	Calculated (T)	Tabulated (T)	(R) Square	(R)
0.000	**7.841**	**1.960**	**0.197**	**0.444**

1.9.2 Testing the second sub hypothesis

H0: There will be no statistically significant differences at the level of significance (α = 0.05) of the satisfaction of elder patient attending general practice clinics in poor areas in Jordan.

It is noted from simple regression analysis results described in table (7) that there is a statistically significant differences at the level of significance (α=0.05) of the satisfaction of elder patient attending general practice clinics in poor areas in Jordan.

This statistically significant effect at the statistically significant level (α = 0.05)**,** as the calculated (T) value

is (12.633), which is higher than tabulated (T) value, is in line with the simple regression analysis results that explain the (39.0%) variance.

According to that the null hypothesis (H0) will be rejected and the alternative hypothesis will be accepted, that means there is a statistically significant differences at the level of significance (α=0.05) of the satisfaction of elder patient attending general practice clinics in poor areas in Jordan.

Table (7): Testing results of the second sub hypothesis

Significant (T)	Calculated (T)	Tabulated (T)	(R) Square	(R)
0.000	**12.633**	**1.960**	**0.390**	**0.624**

1.10 Recommendations

Upon the study results, and upon the answers of the study sample respondents of elder patients attending general practice clinics in poor areas in Jordan concerning the awareness and satisfaction of these patients, the researchers recommended the following recommendations:

1. Educate elder patients about the importance of general practice clinics, as they provide health services and health care in poor areas of Jordan.
2. Encourage elder patients to exploit the medical services provided by the general practice clinics in poor areas of Jordan in the correct manner.
3. Conduct workshops and educational bulletins among elderly patients about the importance of the role of general practice clinics in the local community.
4. Conduct further researches with surveying more variables and dimensions about the role of general practice clinics in poor areas of Jordan.

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