

Economic engagement and disease prevalence among elderly people in Rawalpindi, Pakistan

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Objective: To explore the relationship between the economic engagement and the prevalence of diseases among elder people in Rawalpindi city, Pakistan.

Methodology: This cross-sectional survey was conducted in two union councils (UC# 46 of Rawal Town and UC# 36 of Potohar Town) of Rawalpindi city. A sample of 384 respondents aged 60-years and above was interviewed. Descriptive analysis and chi-square tests were run to see the correlation between economic engagement and the prevalence of diseases.

Results: There was significant correlation between the economic activism and prevalence of diseases among elderly people. About 42.4% elderly persons were economically active and

they had fewer diseases while those who were not working had more diseases. A p value of 0.003 showed a significant association among the selected study variables. We found a positively significant relationship between the age, gender, economic engagement and prevalence of disease among elderly people.

Conclusion: By engaging the elderly population in healthy activities we can reduce their chances to fall ill. The majority of elderly who were engaged in any work had lesser prevalence of diseases. These findings can be helpful in devising well-directed policies to engaging elderly people to minimize their risk of diseases.

Keywords: Disease prevalence, economic engagement, elderly people.

INTRODUCTION

The recent scientific advancements and the health provisions made it possible for the people to survive much longer.¹ In some countries where the health system is bit weaker, the elderly people can face many issues concerning health when they cross 60-years of age. Physical and financial dependence reduced social mobility and social participation and increased rate of ailments make a case much stronger for the elder people to engulf diseases. Over the course of one century, the elderly population has swelled up from 1% to 6% of the world population. Further, it is expected that the overall size of elderly population will grow and can reach to 20% of the total world population by 2050.²

The stock of people aged 60-years and above has increased thrice since 1950 and it reached to 600 million during 2000 and it reached to 700 million in 2006. We can expect that this size to further grow to a total of 2.1 billion by 2050.^{3,4} The UNFPA also predicted an increase in this size to almost 22%.⁵ Developing countries contain about 2/3 proportion of the elderly population and the number of elderly aged over 80-years has swelled further.⁶ Pakistan is no exception (Table 1). A 2017 estimates predicted elderly over 60-years age to two fold by 2050 and more than threefold by 2100 and

could expand from 962 million during 2017 to 3.1 billion by 2100.⁷

As a person's age grows, the organ and body are exposed to deterioration. A less efficient immune system indicates to growth in illnesses for example, visual or hearing impairments and disorders of bone. The Human Development Index (HDI) statistics put Pakistan at 150 from 189 countries worldwide. Among absolute old age population in Pakistan, only 2.3% are assisted with a pension. While the increase in the elderly people means a rise in the dependent section of the society, it has direct bearings in the economy of Pakistan. Furthermore, challenges such as lack of food items, inadequate health services, and other injustices confronted by the senior citizens build further problems.⁸⁻¹¹

The US census board pointed Pakistan at the 5th position based on the population with 2,33,500,636 people, and in 2006 the population was numbered at 166 million. At the same-time, the mean life-expectancy in Pakistan is 62, around 4.48 percent live to the age of 65 or above.¹² AS disease burden is elderly is increased, there is need to explore this phenomenon in Pakistani context. The current research was focused to explore the relationship between the economic engagement and the prevalence

Table 1: Historical background or transitional details [60 years and above].

Country	Reference Date (as of 1 July)	Total population, both sexes combined, by five-year age group (thousands)									
		60-64	65-69	70-74	75-79	80-84	85-89	90-94	95-99	100+	Total
Pakistan	2010	3705	3045	2150	1359	707	269	64	8	1	11308
Pakistan	2011	3743	3093	2215	1397	737	291	75	10	1	11561
Pakistan	2012	3784	3136	2289	1434	762	306	82	13	1	11808
Pakistan	2013	3845	3179	2369	1474	784	314	86	15	1	12066
Pakistan	2014	3945	3225	2445	1521	804	317	84	14	1	12357
Pakistan	2015	4099	3279	2513	1578	824	315	76	10	1	12694
Pakistan	2016	4272	3308	2550	1632	857	340	88	12	1	13060
Pakistan	2017	4495	3342	2585	1690	883	357	96	15	1	13464
Pakistan	2018	4752	3393	2620	1750	907	365	100	17	1	13905
Pakistan	2019	5018	3483	2660	1805	933	367	97	16	1	14379
Pakistan	2020	5279	3623	2706	1853	962	365	85	11	1	14885

Source: United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Prospects 2019, Online Edition. Rev. 1.

of diseases among elder people in Rawalpindi, Pakistan.

METHODOLOGY

The data were collected from the elderly people residing in Union Council No. 46 (Rawal Town) and Union Council No. 36 (Potohar Town) in Rawalpindi city, Pakistan. A sample of 384 was calculated at 95% confidence interval, 50% response distribution and 5% error margin.

These respondents were purposively interviewed during personal field visits. A semi-structured interview schedule was developed and implemented to collect the data. Data collection was done purely on volunteer basis. The consent of respondents was taken before the start of interviews. Every respondent was fully informed about the objectives of study.

Statistical Analysis: Data were analyzed using SPSS version 24. Descriptive analysis was done and chi-square was performed to observe the relationships between study variables.

RESULTS

Table 2 presents the gender, age, and economically active status of study respondents. Percentile shows 70:30 ratios of male and female participation, while the date of age distribution shows that 53.9% participants

were from age group 60 – 65 years, 20.8% belongs to age category 66 – 70 years and rest of the participants were of age 71-years and above. At the end figures of the economic activity reveals that 42.4% elderly were currently involved in different economic activities while 57.6% were dependent on their families.

We only asked about the five main diseases which include hypertension, heart problem, diabetes, arthritis and asthma. The data overall showed a mix trend of

Table 2: Demographic profile (n = 384).

Variable		N	%
Gender	Male	269	70.1
	Female	115	29.9
Age	60 – 65	207	53.9
	66 – 70	80	20.8
	71 – 75	51	13.3
	76 – 80	31	8.1
	80+	15	3.9
Economically Active	Yes	163	42.4
	No	221	57.6

Table 3: Gender, economic engagement, age and disease profiles (n = 384).

Gender	Active Economically	Do you have any of the following Disease?					Mean (SD)	p values
		Hypertension	Heart Problems	Diabetes	Arthritis	Asthma		
Male	Yes	29.4%	48.6%	57.9%	26.7%	27.8%	5.71 (2.533)	0.003
	No	70.6%	51.4%	42.1%	73.3%	72.2%	5.12 (2.489)	
Female	Yes	28.6%	7.1%	10.0%	25.0%	44.4%	5.50 (2.529)	0.164
	No	71.4%	92.9%	90.0%	75.0%	55.6%	4.41 (2.485)	
Total	Yes	29.0%	36.7%	41.4%	25.9%	33.3%	5.67 (2.526)	0.003
	No	71.0%	63.3%	58.6%	74.1%	66.7%	4.85 (2.505)	
Gender	Age							
Male	60 – 65	2.8%	12.8%	12.1%	5.0%	5.7%	5.85 (2.438)	0.07
	66 – 70	7.1%	14.3%	21.4%	5.4%	8.9%	4.88 (2.494)	
	71 – 75	9.8%	12.2%	9.8%	7.3%	9.8%	5.22 (2.525)	
	76 – 80	19.0%	19.0%	14.3%			4.57 (2.942)	
	80+	10.0%		20.0%	20.0%	10.0%	4.80 (2.150)	
Female	60 – 65	6.1%	13.6%	13.6%	12.1%	7.6%	5.09 (2.410)	0.04
	66 – 70	16.7%	8.3%	37.5%		4.2%	4.21 (2.637)	
	71 – 75	30.0%	20.0%		10.0%	20.0%	3.60 (2.591)	
	76 – 80	10.0%		20.0%	10.0%	10.0%	5.50 (2.635)	
	80+	40.0%	20.0%		40.0%		2.40 (1.517)	
Total	60 – 65	3.9%	13.0%	12.6%	7.2%	6.3%	5.61 (2.449)	0.006
	66 – 70	10.0%	12.5%	26.3%	3.8%	7.5%	4.68 (2.540)	
	71 – 75	13.7%	13.7%	7.8%	7.8%	11.8%	4.90 (2.594)	
	76 – 80	16.1%	12.9%	16.1%	3.2%	3.2%	4.87 (2.837)	
	80+	20.0%	6.7%	13.3%	26.7%	6.7%	4.00 (2.236)	

disease prevalence among male and female respondents. Chi-square shows ($p = 0.006$) which depicts the highly significant relationship prevails between age groups of older persons and their present disease status. Elderly females suffered more than males in term of disease prevalence. The chi-square results also represent strong relationship between economic activism and disease prevalence. Women, who are not currently working, faced more disease pervasiveness (Table 3).

DISCUSSION

Earlier studies revealed that the positive correlation between the gender and mental health, which further relatable to the factors like age, culture, social support,

biology, and violence.¹³ Studies have also shown that there is a higher vulnerability of depression among women which is least partly accounted for negative attitudes towards them, lack of acknowledgement for their work, lesser opportunities in education and employment, and greater risk of domestic violence.^{14,15} Matthews et al, stated that depression in the later years of life may be related to psychosocial factors and socioeconomic status).¹⁶ Additionally, not just the biological and healthcare factors influence health, the cultural, political, social and physical conditions equally account for the way people live and grow older.¹⁶ Healthy ageing is based on numerous factors that comprise the individuals, families and nations which

affect them directly and indirectly.

When diseases begin, they may lead to disability which is coped up in multiple ways by the people. Active ageing has interplay amongst all the determinants of ageing. To furnish the argument with example, we can see that poor women are likely to be more exposed to inadequate housing, societal violence and may be malnourished as well since they generally have lesser access to financial resources in this age group.¹³ Elderly women encounter other challenges in meeting their health needs, for example, since may have lesser access to the financial resources.^{17,18} They may be left in solitude and hence increased likelihood of symptoms is attributed to the process of ageing other than mere illness.^{19,20}

Additionally, a study from Pakistan found a noteworthy difference among the health profile of economically active and inactive older people, as proportion of every disease was highly reported among economically dependent elderly people.²¹ The elderly females who served throughout their life as caregivers to their children and family should be reciprocated in this age. Pakistan is currently having the largest youth cohort in the world, which will be lying in the elderly segment of the society after 3 to 4 decades. There is an imminent need to address the future challenges of such an emerging population segment.

CONCLUSION

Undoubtedly no one can reject the importance of financial resources at any stage of life but it becomes more significant when someone reaches age 60. If someone is working and earning after 60, his lifestyle is completely different from unemployed people. If we relate this situation to the female gender group, they are more vulnerable to poor health consequences. The study results showed percentile differences between currently earning males and females of sixty years and above.

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