

## Impact of food consumption, social network and recreational activities on health of older people in Punjab, Pakistan

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**Objective:** To investigate the relationship between foods consumption habits, social network, and recreational activities of the elderly men with their health status in Punjab, Pakistan.

**Methodology:** This cross-sectional study was conducted from two districts of Punjab. A sample of 600 respondents was recruited and a pre-coded interview schedule was used for data collection. The data were analyzed through univariate and bivariate analysis to predict the variation in the dependent variable on account of the independent variable.

**Results:** The study found that better food consumption patterns and strong social ties or social networks improve the health status of elderly men. Elderly men with better recreational facilities tend to have better health outcomes.

**Conclusion:** Health status of elderly men can be improved by providing opportunities for recreational activities, strengthening social networks and improving food consumption. (Rawal Med J 202;45:934-937).

**Keywords:** Social networks, health status, gerontology.

### INTRODUCTION

The proportion of aged population in the world is increasing by every passing day and is expected to reach to an astonishing number of 2 billion in 2050, which was 530.5 million in 2010.<sup>1</sup> As of 2019, almost 15 million people living in Pakistan are aged over 60 which are 7% of the country's total population.<sup>2</sup> The concept of ageing gained much importance in the 21<sup>st</sup> century owing to certain demographic factors.<sup>3</sup> There are multiple factors that hinder the health status of the aged people. Food consumption pattern, physical environment, social networks and available recreational activities play a pivotal role for survival of older people.<sup>4</sup> Effective social interaction and intimacy improves emotional strength whilst lack of social capital and loneliness are major causes of stress.<sup>5</sup> Inadequate social support augments the sense of loneliness among the elderly while lack of required social capital is linked to depression, hopelessness and loss of well-being which consequently affect the quality of life of elderly.<sup>6,7</sup> There is a positive effect of engagement in social activities on cognitive function<sup>8</sup> and poor social relationships were associated with an increased risk of cognitive decline.<sup>9</sup>

In Pakistan, most of the elderly don't eat meat and

lack in fresh fruits and vegetable. Low and middle income countries have not food stamps programs/schemes for the poor and deserving elderly, which is considered to be the state responsibility.<sup>10</sup> There is lack of research to address the social and psychological needs of elderly men in Pakistan. The present study aimed to find the relation between social network, food consumption habit and recreational activities on the status of the aged people.

### METHODOLOGY

Out of the total of 36 districts of Punjab two districts (Faisalabad and Gujrat) were randomly selected. In second stage, two tehsils of Jaranwala from Faisalabad and Kharian from Gujrat were selected by simple random technique. At third stage, twelve rural union councils (three from each selected tehsil) were selected randomly. At next stage, twelve villages (one from each union council) were selected randomly. At last stage, 600 elderly men (50 from each village) were selected through purposive sampling technique. The inclusion criteria were age of 60 or above and retired from regular job. The exclusion criteria of the study were if someone is not sure about his age and guests. The

advance research board of University of Agriculture approved the research protocol and informed consent was taken from the respondents before conducting the interview.

For the analysis of the data indexes were framed regarding three basic components of the study i.e. food consumption, social network status and recreational activities of the aged. Food consumption patterns were measured by 7 items with 7 minimum and 34 was the maximum score.

**Statistical Analysis:** Statistical analysis was performed using SPSS version 20. A univariate and bivariate analysis and chi square tests were applied for the study results.

## RESULTS

Most men were 60-64 years of age, a great majority (94.0%) were Muslim, two thirds (65.5%) were married and around 46% were having 5-8 family members (Table 1). Chi-square value ( $\chi^2 = 80.80$ ) a highly significant ( $p = .000$ ), which depicts association among recreational activities of the elderly men and their health status.

**Table 1. Demographic characteristics of the selected elderly men.**

Age	Number	%
60-64	241	40.2
65-69	167	27.8
70+	192	32.0
Total	600	100.0
<b>Religion</b>		
Muslim	564	94.0
Christian	36	6.0
Other	600	100.0
<b>Marital status</b>		
Married	393	65.5
Single (Never married)	12	2.0
Widowed	183	30.5
Separated	12	2.0
Total	600	100.0
<b>Family Size</b>		
Up to 4 members	127	21.2
5-8 members	275	45.8
Above 8 members	198	33.0
Total	600	100.0

**Table 2. Ailment by the selected elderly men (n=600).**

Health problems	Often		Sometimes		Never	
	No	%	No	%	No	%
Headache, body pain	366	61.0	199	33.2	35	5.8
Backache/feverish	90	15.0	334	55.7	176	29.3
Sleeplessness at night	280	46.7	193	32.2	127	21.2
Cough	120	20.0	270	45.0	210	35.0
Skin disease/allergy	32	5.3	77	12.8	491	81.8
Sciatica	0	0.0	55	9.2	545	90.8

**Table 3. Food consumption patterns of selected elderly men (n=600).**

Food	Daily		2-3 times a week		Once a week		Monthly		Never	
	No	%	No	%	No	%	No	%	No	%
Meat	40	6.7	78	13.0	144	24.0	290	48.3	48	8.0
Fish	3	0.5	18	3.0	9	1.5	84	14.0	486	81.0
Eggs	72	12.0	95	15.8	112	18.7	179	29.8	157	26.7
Milk	156	26.0	199	33.2	132	22.0	54	9.0	69	11.5
Fruits	84	14.0	110	18.3	238	39.7	162	27.0	6	1.0
Vegetables	144	24.0	330	55.0	66	11.0	12	2.0	48	8.0
Pulses	24	4.0	294	49.0	126	21.0	120	20.0	36	6.0

**Table 4. Selected elderly men's opinion about interpersonal relationship within family and friendship (n=600).**

Social network (Interpersonal relations by)	Most of the time		Sometimes		Never	
	No	%	No	%	No	%
How much time you spent with your family members?	429	71.5	171	28.5	0	0.0
Up to what extent you share your problems with your family members	276	46.0	294	49.0	30	5.0
Did your family members consult you in important family decisions	168	28.0	312	52.0	120	20.0
To what extent you are welcome to spend time with your grand children	132	22.0	276	46.0	192	32.0
Do you have decision making power in marriages of your grandsons/granddaughters	96	16.0	270	45.0	234	39.0
How often you meet your friends freely	243	40.5	324	54.0	33	5.5
Do you call your friends at your house freely	132	22.0	306	51.0	162	27.0
How often your relatives invite you in functions	219	36.5	276	46.0	105	17.5
How often you visit your neighbor	108	18.0	318	53.0	174	29.0

Headache and sleep problems were main ailments found (Table 2). Table 3 shows association food consumption pattern of the elderly men and their health status. Chi-square value ( $\chi^2 = 142.72$ ) a highly significant ( $p = .000$ ) which depicts association among food consumption pattern of the elderly men and their health status. Gamma statistics showed a significant and positive relation among the variables. It tells that food consumption pattern is positively associated with health status of elderly men. Chi-square value ( $\chi^2 = 23.05$ ) a highly significant ( $p = .000$ ) which depicts association among social networks of the elderly men and their health status. (Table 4) also depicts a strong positive association of recreational activities with a good health status of older men.

## DISCUSSION

In this study, food consumption pattern was positively associated with health status of elderly men. These findings are consistent with previous research results which found the status of the aged people is directly associated with the food patterns as it enables the aged population to counter the health issues in a better way.<sup>11</sup> Another study also demonstrated a similar results that availability of fresh milk and vegetables have better health consequences for the aged people.<sup>12</sup>

The current study supported the view that health status of the aged is influenced by the food patterns. The study result showed that social networks had positive impact on the health status of elderly men. Earlier research results support our study findings which found social network engage people in positive attributes towards others which increase their health status.<sup>13</sup>

Our study findings were that social network can cope to stressful situations in better way prove positive health consequences for the aged people, as reported by a previous study.<sup>14</sup> Recreational activities had positive relationship with the health status of elderly men. Similarly, sports and recreational activities have been found to be an important factor in countering the health issues. Sports and recreation are also a pre-requisite for healthy life.<sup>15</sup>

## CONCLUSION

Food consumption, social network and recreational activities are significantly affecting the health of the aged people. If aged people are having positive food consumption patterns it is more likely to positively affect their health status. If they are actively involved in the recreational activities it is more likely to bring positive health attributes to the aged people.

### Author Contributions:

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