

A Profile of Self-reported Functional Disability Among Older Kuwaiti Men and Women

Extended Abstract for PAA, 2009 (for session 905; or 902)

Introduction

Functional disability is now considered an important aspect of the quality of life of an individual which detracts from healthy life years. Health planners are therefore seeking ways of reducing such disability to ensure extension of healthy life years. It has been found that chronic illnesses play a substantial role in increasing functional disability.

The objective of this paper is to identify the significant socio-demographic correlates of disability, as well as its severity, controlling for chronic illness. Predictors of disability and severe level of disability will be assessed by using multiple logistic regression. Identification of such factors will assist health planners in developing a better knowledge about groups faced with enhanced risk of disability in the country.

Data

The paper is based on data collected in a household survey conducted among Kuwaiti nationals aged 50+ held in 2006/7. A total of 2487 older men and women were asked in an interview to report about various aspects of disability. A proxy respondent, usually a close relative, answered the questions in 5.6 % cases where the respondent was too old or sick to participate.

Functional disability was measured as follows : (1) By using 5 measures of disability suggested by Nagi (whether a person had a little or lot of difficulty in crouching, lifting items, walking, climbing stairs, or grasping objects); (2) By asking whether the respondent needed any assistance or devices for walking around the house, eating, putting on clothes or taking a bath; (3) By asking whether the respondent had any difficulty in going shopping, managing money or using transportation. The above measures rendered a score of 0-28, 0 representing no disability and 28 representing the highest level of disability.

Data were analyzed by comparing those with no disability with the ones who reported any disability. In order to analyze the severity of disability, persons with reported disability were divided into three groups. Those with a score of 1-9 were ranked as having mild disability, 10-19 as moderate disability and 20-28 as severe disability.

Results

Preliminary analysis of the association between various factors and disability is shown in Table 1. About a quarter of all respondents said that they suffered from at least some functional disability, slightly more women than men (25 % and 24 %, respectively). We found that functional disability was significantly higher among the older, currently non-married, non-Bedouin, least educated, and currently non-working persons. The pattern of association between various socio-demographic features and disability was very similar for men and women.

Functional disability was significantly higher among those with major chronic illnesses. About 30 % of those suffering from hypertension or diabetes reported to have some functional disability compared with only about 19-20 % of those without these chronic illness. The differences in case of heart disease and arthritis were much larger. However, the bivariate analysis in Table 1 does not control for the respondent's age which has a strong positive association with disability, and is also known to be positively associated with chronic illness.

Further analysis

In order to control for the above confounding effects, multivariate analysis using binary logistic regression will be conducted to answer the following questions:

- 1) What are the significant socio-demographic correlates of disability, once the presence of chronic illness is controlled?
- 2) What are the significant socio-demographic correlates of severe disability among the ones who have at least some disability?

In addition to the socio-demographic factors specified above, other psycho-social and lifestyle factors such as reported experience of depressive symptoms and living arrangements, and obesity will be included to obtain a more comprehensive picture of the disability pattern among older Kuwaitis.

Importance

Valid and reliable information on the profile of disability according to socio-demographic characteristics will provide useful knowledge to health planners dealing with geriatric care. BY identifying the relatively high risk groups, the analysis may point out a direction for instituting plans that may reduce the prevalence of disability among older Kuwaiti nationals.

Table 1. Prevalence of functional disability among older Kuwaiti men and women according to sociodemographic features, and chronic illnesses (% is cell focused)

Variables	Functional Disability		
	T n=2443	M n=955	F n=1488
Disability (%)	24.8	24.1	25.3
SOCIODEMOGRAPHIC FEATURES			
Age			
50-59	9.3	8.7	9.6
60-69	19.7	12.3	24.8
70+	47.7 ***	44.0 ***	51.4 ***
Ethnicity			
Bedouin	20.9	21.8	20.3
Non-Bedouin	28.3 ***	25.9	29.8 ***
Marital status			
Married	20.3	22.5	18.1
Not married	36.8 ***	53.1 ***	35.5 ***
Grades of education (years)			
0-4	33.6		32.0
5-8	14.4	38.0	13.7
9-12	10.8	15.0 13.9	7.3
13+	13.8 ***	15.5 ***	11.7 ***
Working status			
Never worked/retired	26.3	26.4	26.2
Currently working	7.2 ***	8.9 ***	3.5 ***
Income per capita (KD)			
<200	19.7	17.1	21.3
200-<300	21.2	19.8	22.2
300-<450	27.0	28.0	26.3
450+	27.1 **	25.6 *	27.9
Children living with the respondent:			
0			
1	25.5	26.7	24.8
1	27.7	27.3	27.9
3+	21.9	18.5	24.0
	24.4	23.6	24.9

CHRONIC PHYSICAL CONDITIONS			
<i>Sum of 15 diseases (mean)</i>	2.1	1.99	2.2
<i>No disability</i>	3.4	3.2	3.6
<i>Disability</i>	***	***	***
<i>Hypertension(%)</i>	19.1	18.7	19.5
<i>No</i>	29.9	29.4	30.3
<i>Yes</i>	***	***	***
<i>Diabetes(%)</i>	20.0	18.5	21.0
<i>No</i>	29.7	29.3	30.0
<i>Yes</i>	***	***	***
<i>Heart(%)</i>	21.7	20.1	22.7
<i>No</i>	39.7	38.8	40.6
<i>Yes</i>	***	***	***
<i>Stroke(%)</i>	22.5	21.3	23.3
<i>No</i>	66.7	63.1	70.3
<i>Yes</i>	***	***	***
<i>Arthritis(%)</i>	16.9	17.8	16.1
<i>No</i>	38.1	42.0	36.6
<i>Yes</i>	***	***	***

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

Table 2. Prevalence of disability among older Kuwaiti men and women according to the degree of severity (column-wise%)

Severity of the disability	Total n=607	Males n=230	Females n=377
Mild	43.2	46.1	41.4
Moderate	21.7	18.7	23.6
Severe	35.1	35.2	35.0