

## Assessment of the Ability to Perform Activities of Daily Living: A Mixed Study on Freedom Fighters in Bangladesh

Haider SA<sup>1</sup>, Miah MT<sup>2</sup>, Jarrin R<sup>3</sup>, Khan MAI<sup>4</sup>

<sup>1</sup>Department of Surgery, Dhaka Shishu (Children) Hospital, Dhaka, Bangladesh; <sup>2</sup>Department of Medicine, Dhaka Medical College, Dhaka, Bangladesh; <sup>3</sup>Public Health Specialist, 4/14 (East Side), Solimullah Road, Mohammadpur, Dhaka-1207, Bangladesh; <sup>4</sup>Department of Respiratory Medicine, National Institute of Diseases of the Chest and Hospital (NIDCH), Dhaka, Bangladesh.

### Abstract

**Background:** Bangladesh got its glorious victory of independence in 1971 from Pakistan after nine months of the liberation war. After 47 years, freedom fighters are in geriatric age. The study aimed to assess the ability to perform daily living activities among the Freedom fighters of Bangladesh.

**Methods:** It was a cross-sectional study and a mixed-method qualitative and quantitative. It was conducted from December 2017 to May 2018. A total of 153 freedom fighters who actively participated in the Liberation War were randomly selected from eight Bangladesh divisions. The Semi-structure questionnaire was collected in quantitative data. Qualitative data was collected by key informant interviews (K.I.I.) Physical functional status was determined by Activity of Daily Living Scales (A.D.L.s) and Instrumental Activity of Daily Living Scales (IADLs). Freedom fighters who actively participated in the Liberation War and gladly participated were included in the study.

**Results:** Among the 153 respondents, 92.8% were Muslim and mean age 68.50±5.808 years. Their monthly family income was a minimum of 6000 BDT and a maximum of 500000 BDT, and 92.2% received the freedom fighter allowance. Most of them lived with their family members and about half of them took care of themselves. Activities of the daily living scale showed that two-third of them had difficulties in one or more activities. The Instrumental Activities of daily living scale revealed that most of them had problems in one or more instrumental activities.

**Conclusion:** This study revealed that the ability to perform daily living activities was so difficult for Freedom fighters at their old ages. Further large-scale studies involving all living freedom fighters could show a more complex scenario.

**Keywords:** Freedom fighters, Bangladesh, Daily Activity, ADLS, IADLS

### Introduction

In 1971 Bangladesh became an independent state from Pakistan after a nine-month-long liberation war. As per the Government selected Red Book, it was identified that 1,51,861 persons were involved in the war actively. The whole Bengali nation feels proud of our freedom fighters. After 47 years, all freedom fighters are in the geriatric age group and eventually, all of them are not in good health. Aging is generally a process of deterioration in an individual's functional capacity that results from structural changes with the advancement of age.<sup>1</sup>

The deficiencies in numerous senses were strongly associated with age, gender and race<sup>2</sup> and significant cause of morbidity and mortality. Falls was an important aspect of geriatric medicine. It was closely related with daily activities. The Center for Disease Control (C.D.C.) reported that one in five falls caused a serious injury such as a broken bone or head injury. Fear of falling can also seriously affected an aging adult's quality of life. Gait disturbances were a common medical problem in old age. In Bangladesh, people became older around the age of 60 because of poverty, and physical, hard-working, inability, and illness due to malnutrition and geographical conditions.<sup>3</sup> Difficulty with the Activity of daily living (A.D.L.) and difficulty with the instrumental Activity of daily living (IADL) were more common with advancing age.<sup>4</sup>

\*Correspondence: Dr. Shawkat Ara Haider, Department of Surgery, Dhaka Shishu (Children) Hospital, Dhaka, Bangladesh;  
email: haider.shadman@gmail.com  
ORCID: 0000-0002-9409-8533

Few instruments had been developed to measure complex activities such as shopping, cooking, managing finances (also termed "instrumental activities of daily living") necessary for functioning in community settings. To assess the normal daily life activities of old people, the Activity of Daily Living Scales (ADLS)' and the 'Instrumental Activity of Daily Living Scales (IADLS) were used.<sup>5</sup>The capacity to handle these complex functions normally had usually been lost before basic "activities of daily living" (e.g., eating, bathing, toileting), which A.D.L. scales could measure.<sup>6</sup> Therefore, assessing IADLS might identify an incipient decline in older adults. In ALDs the total score ranges from 0 to 6, and for IADLS, from 0 to 8. In some categories, only the highest level of function received 1; in others, two or more levels had scores of 1 because each described competence representing some minimal function level. These screens were useful for indicating precisely how a person was performing now.<sup>7,8</sup> As a progression of life, freedom fighters (F.F.s) of Bangladesh passed the old age where their daily living status had not been studied yet. Therefore, we aimed to assess the ability to perform daily living activities among Bangladesh's freedom fighters.

## Materials and Methods

It was a cross-sectional study and a mixed-method qualitative and quantitative. It was conducted from December 2017 to May 2018. According to the Government-selected red book, 1,51,861 persons actively participated in the liberation war of 1971. One hundred fifty-three respondents were selected by random sampling from eight divisions in Bangladesh. Semi-structured questioner collected quantitative data and qualitative data were collected by key informative interviews (K.I.I.). Physical functional status was determined by 'Activity of Daily Living Scales (ADLS)' and 'Instrumental Activity of Daily Living Scales (IADLS)'. Every respondent would be informed of the aims of the study. Verbal informed consent was obtained from every participant. Privacy and confidentiality were strictly be maintained during data collection. The study subjects' collected information was secured in a locker under the key in the study premises. Freedom Fighters who actively took part at the Liberation

War 1971 (approved by Government red book.) participated in the study and severely physically and mentally sick persons were excluded. The participant would have the liberty to refuse and withdraw from the study at any time. Key informant interviews (K.I.I.) were qualitative in-depth interviews from which we were collected detailed information. It was in-depth interviews with people who knew what was going on. In the key informant interviews, we collected information from a wide range of people. Here, Key informant interview (K.I.I.) was done with ten sector commanders who willingly talked about their well-known freedom fighters. All questionnaires were checked for completeness and correctness. Coding and classification were done. Data were entered, cleaned and analyzed using statistical methods SPSS. A Chi-square test was done to see the relationship

## Results

Among 153 respondents, mean age  $68.50 \pm 5.808$  years (minimum age 61 years and maximum 94 years). 92.8% (n=142) of respondents were Muslim and others were Hindus. 20 % of freedom fighters were graduates and 12% master's degree holders. But 5.5% had no education and 2% could do their signature only.

**Table I:** Demographic variables among the respondents (n=153)

Variable	Frequency	Percent
<b>Age (completed years)</b>		
61-65	54	35.3
66-70	62	40.5
70+	37	24.2
<b>Religion</b>		
Islam	142	92.8
Hinduism	11	7.2
<b>Education Status</b>		
Masters 'degree	19	12.4
Graduation	31	20.3
Higher Secondary	16	10.5
Secondary	47	30.4
Primary	29	19.0
Only signature	3	2.0
No education	8	5.5
<b>Total</b>	<b>153</b>	<b>100</b>

Their minimum monthly family income was 6000 BDT and the maximum was 500000 BDT. 92.2% received the freedom fighter allowance, 96.08% lived with their family, and about 53% took care of themselves.

**Table II:** Social profile of the respondents (n=153)

Variable	Frequency	Percent
<b>Govt. allowance</b>		
Yes	141	92.2
No	12	7.8
<b>Living with whom</b>		
Alone	2	1.31
Family members	147	96.08
Other family members	13	8.5
Others	1	0.65
<b>Caregiver</b>		
Self	81	52.94
Husband/wife	57	37.25
Son	52	33.99
Daughter	10	6.54
Other family members	1	0.65
<b>Total</b>	<b>153</b>	<b>100</b>

Activities of daily living (A.D.L.s) were routine activities of the people, which they did every day without assistance. There were six basic A.D.L.s: eating, bathing, getting dressed, toileting, transferring, and continence. "Instrumental activities of daily living," or IADL's were activities related to independent living. These included preparing meals, managing money, shopping for groceries or personal items, performing light or heavy housework, doing laundry, and using a telephone. For A.D.L.s, the total score ranges from 0 to 6, and for IADLs, from 0 to 8. In some categories, only the highest level of function received 1; in others, two or more groups had scores of 1, because each described competence representing some minimal level of the process.

**Table III** Distribution of the respondent by "Activities of Daily Living" A.D.L.s:

Score	Frequency	Percent
0	3	2.0
1	5	3.3
2	12	7.8
3	17	11.1
4	26	17.0
5	37	24.2
6	53	34.6
Total	153	100.00

"Activities of Daily Living" shows that, 2% respondents got score 0, 3.33% scored 1, 7.8% scored 2, 11.1% scored 3, 17.0% scored 4, 24.2% scored 5 and 34.6% scored 6.

**Table IV:** Distribution of the respondent by "Instrumental Activities of Daily Living" IALDs

Score	Frequency	Percent
0	5	3.3
1	8	5.2
2	9	5.9
3	15	9.8
4	23	15.0
5	29	19.0
6	15	9.8
7	22	14.4
8	27	17.6
<b>Total</b>	<b>153</b>	<b>100.00</b>

Instrumental Activities of Daily Living" (IALDs) shows that, 3.3% respondents got score 0, 5.2% scored 1, 5.9% scored 2, 9.8% scored 3, 15.0% scored 4, 19.0% scored 5, 9.8% scored 6, 14.4% scored 7 and 17.6% scored 8.

**Table V:** Showing the results of Chi-square test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	270.890 <sup>a</sup>	200	.001
Likelihood Ratio	185.432	200	.762
Linear-by-Linear Association	6.108	1	.013
N of Valid Cases	153		

234 cells (100.0%) have expected count less than 5. The minimum expected count is .03

From table V the Chi-square test it was found that the p-value was 0.001, which was less than the level of significance 0.05, so the null hypothesis of no association between IADLs score and respondent's age may be rejected. So that there was a relationship between IADLs score and respondent's age.

**Key Informant Interview (K.I.I.):** The key informant interviews were conducted with sector commanders' freedom fighters who willingly talked about their well-known freedom fighters. At these interviews, they informed about their current health status and injury during the liberation war. They also told about the torture which Pakistani Army did to the Freedom Fighters in the tortured cell.

Some Freedom fighters had joints dislocation of their upper and lower limbs, leg injury, loss of sensation in hands and legs due to torture during the liberation war. That results from impairment of daily physical Activity.

Statement- "In 1971, When I was in the prison of torture cell, I lost my hands and fingers feelings due to physical abuse. That time I was so young, I could

not feel that. At present, I have been suffering from numbness and difficulty in physical Activity for the last 7-8 years."

## Discussion

After 47 years, all freedom fighters were in the geriatric age group. In our study, we randomly selected 153 freedom fighters from 1,51,861 freedom fighters of eight divisions. Their mean age was  $68.50 \pm 5$ . Difficulty with daily living activities (A.D.L.) and Instrumental Activity of daily living (IADL) was observed in a study done by the University of Chicago, Illinois. Difficulty with A.D.L. functions was more common with advancing age.<sup>8</sup> In our study, A.D.L. and IADL were also common with advancing age. A cross-sectional study was performed on Iran-Iraq war veterans with hip or hemipelvis amputations in Iran. At that study, it was found that 83.33% had limitations in at least one domain of the IADL. A.D.L. and IADL showed an intermediate to strong correlation.<sup>9</sup> In this study, there was a relationship between IADLs score and respondent's age. The score signified that more than one-third of Freedom fighters were found good in daily living activity and others have difficulties in one or more Activity. In another study in South Florida, IADL and A.D.L. were the most sensitive assessment of older individuals' function.<sup>10</sup> In our study, IADL and A.D.L. were correlated with ages.

Thus, the current study assessed the ability to perform daily living activities among the Freedom fighters of Bangladesh. Moreover, during the liberation war, many Freedom fighters died, and many were injured. The injury occurred in different parts of the body by grenades, shells, bullets and cannonball. Splinters pierced different body sites, and some freedom fighters had been living with splinters at their body still now. Such wartime injuries and traumas could add another portion of the burden. 'Activity of Daily Living Scales (ADLS)' and 'Instrumental Activity of Daily Living Scales (IADLS) are widely used instruments to assess daily living activities.<sup>10,11,12</sup>

## Conclusions:

It is the reality that the elderly is the last stage of our life cycle. Our Honorable Freedomfighters are passed through this stage. So, it is our responsibility to come forward and give them a quality life. This study revealed that Freedom fighters' daily living activities

were so difficult at their old ages. It was related to their advancing of age. Further large-scale studies involving all living freedom fighters could reveal a more complex scenario.

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