ORIGINAL ARTICLE

Quality of Life and Physical Aspects among People with Disabilities Attending Health Rehabilitation Centers at Hilla City: A Cross-sectional Study and Correlational

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Abstract

Background: A major topic in disability research, Quality of Life (QOL) refers to a person's sense of well-being derived from their contentment with important areas of their lives. Disabilities are a medical and social problem. People with Disabilities (PWDs) have physical limitations that severely restrict their access to all aspects of practical and social life. Determine how physical characteristics and demographic traits correlate to the quality of life of individuals with disabilities.

Methods: Descriptive Correlational study was undertaken at two rehabilitation centers for people with disabilities and physiotherapy in Hilla city (Babylon Specialized Center for Medical Rehabilitation, Babylon Center for Artificial Limbs) from September, 2024 to June, 2025. A155 patients who were selected according to the non-probability sampling method. Data were analyzed using descriptive and inferential statistics.

Results: The statistical results showed that 103 (68.7%) of individuals had a moderate quality of life.59 (39.3%) possessed fully reliant physical elements (daily living activities) with a mean of (46.25±7.254) and (26.89±8.493, respectively. The results demonstrated There was a significant negative correlation between age and quality of life ($r=-0.202$, $p=0.013$). Quality of life differed significantly according to income ($F=7.961$, $p<0.001$) and type of disability ($F=2.321$, $p=0.015$). Statistically significant differences in physical aspects were observed across categories of level of education (Kruskal–Wallis $H=13.829$, $p=0.032$), occupation status ($H=15.074$, $p=0.010$), type of disability ($H=45.079$, $p<0.001$), and cause of disability ($H=7.694$, $p=0.021$). Furthermore, there was a highly statistically significant positive correlation between physical aspects and quality of life ($r=0.481$, $p<0.001$).

Conclusion: People with disabilities were found to have a moderate state for both quality of life and physical aspects, with daily living activities. Higher quality of life was positive correlations with physical aspects.

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Keywords: Health rehabilitation centers, People with Disabilities, Physical aspects, Quality of Life

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Introduction

The common term for inability or disability is a medical condition that makes it difficult, if not impossible, for a person to perform activities of daily living, which include more complex tasks such as cooking or activities of daily living such as climbing stairs.[1] People with disabilities (PWDs) have physical limitations that severely restrict their access to education, work, marriage, and longevity, in addition to the systematic denial of basic human rights.[2] Research suggests that the quality of life for those with impairments is lower than that of the general population. All these physical difficulties and limitations have a big impact on happiness and life satisfaction. Psychological distress, impatience, loneliness, pessimism, and dissatisfaction are signs of a low quality of life. Young and middle-aged people's impairment rates have significantly increased as a result of the aging population and the advent of physical limits.[3]

The term Quality of Life (QOL) denotes an individual's sense of well-being stemming from satisfaction with key life aspects, and it has emerged as a crucial concept in disability research. Disabilities represent both a social and a medical issue.[4] The decline in quality of life (QOL) can be attributed to a wide range of factors, including disability. Additionally significant are individual biological and socioeconomic characteristics (e.g., sex, education, income, and employment) as well as psychosocial interactions such as stigma, discrimination against individuals with disabilities, loneliness, and relationships with loved ones.[5] When compared to their able-bodied counterparts, people with physical disabilities have lower levels of well-being and a lower quality of life, mostly because they are unable to participate in certain social activities. In the context of public health, quality of life (QoL) is a multifaceted notion that includes personal beliefs, psychological and social well-being, and physical health. Quality of life is subjective and affected by both internal and external factors in people with physical disabilities. These issues may include anxiety, depression, low self-efficacy, and a lack of physical activity.[6]

In addition to overcoming daily challenges, people with sensory or motor disabilities are more likely to face stigma, a variety of symptoms, and a chain reaction of health issues (such as depression, discomfort, and weariness). It's critical to identify protective variables that can enable these people to overcome these challenges and lead healthier lives.[7] Rehabilitation programs aim to restore functional capacity and assist with ADLs. It would be prudent to find out which behaviors have the biggest effects on health. Community health nurses should be knowledgeable of their patients' abilities, limitations, and particular needs in order to enhance their psychological, emotional, and physical well-being.[8]

The goal of the current study to address a social problem that a segment of our society suffers from, a study was pointed to determine how physical characteristics and demographic traits correlate to the quality of life of individuals with disabilities.

Methods

Design of Study

A descriptive correlation research study was carried out from September 12, 2024, to April 20, 2025, in order to achieve the aforementioned objectives.

Setting of Study

This study was carried out in the Rehabilitation Centers for Disabled and Physiotherapy at Hilla City/ Babylon Province, which includes the following:

1- Babylon Specialized center for medical rehabilitation. This center affiliated with the Babylon Health Department, the Physiotherapy Department at Babylon Rehabilitation Centers for the Disabled, which is affiliated with the department. It receives It receives various types of disabilities these include mental disability, physical disability, deaf and mute and others injury.

2- Babylon Center for Artificial Limbs and Medical Supports. This center affiliated with the Babylon Health Department. It receives amputees and people who needs to medical support

Sampling Method

The total accessible population was estimated based on the number of individuals with disabilities attending the rehabilitation center during the three months prior to the initiation of the study, which was approximately 250 individuals. Based on a 95% confidence level and a 5% margin of error, the required sample size was calculated. Accordingly, 150 participants were recruited using a convenience sampling technique during the data collection period. (Physical disability)and included from (Paralysis of all kinds , Amputation of all kinds and other injuries that contain to Foot drop, Chircot's disease, scoliosis, bow legs,spinal muscular atrophy , duchenne muscular dystrophy) selected through non-probability (convenience) sampling method due accessibility and the exploratory nature of the study, but convenience sampling may introduce selection bias, as participants who are more readily available may not accurately represent the broader population of physical disable people in the Babylon Governorate.

Study Instrument

To achieve the study's objective, a specific questionnaire was standard after an extensive evaluation of related literature in the topic of interest phenomena. The questionnaire was divided into three sections:

Part I: Demographic Characteristics

this section addresses the collection of the basic socio-demographic characteristics of participants that constitutes from 11 elements that includes: (age, sex, Level of education, Marital Status, Occupation status, Income, Residence, Type of disability, basic materials or needs available for disabled people, Cause of disability and Duration of disability).

Part II: Quality of life scale (WHOQOL- BREEF)

This part includes the QOL scale .This scale was originally developed by WHO in 1996 to measure QOL as a short tool for assessing QOL it is an abbreviated version of the original WHOQOL-100 scale and then translated into Arabic (Appendix: c) It contains 23 items that divided into (4) domain: Physical health (7) items, Psychological health (6) items, Environmental health (7) items and Social relationship domain (3) items After modifications by experts

Part III: ADL

This section comprises 14 items focusing on ADL for disabled people (physical disability) that divided into (2) domain: basic domain (6) items includes: (Toilet, Feeding, Dressing, Grooming, Physical Ambulation and Bathing) and Instrumental domain (8) items includes :(Telephone, Shopping, Food Preparation, Housekeeping, Laundry, Mode of Transportation, Responsibility for Own Medications and Ability to Handle Finances) After modifications by experts

Validity

The questionnaire's validity was established through a review by 14 experts, who assessed its clarity and relevance concerning the psychological aspects and quality of life for individuals with physical disabilities. Multidisciplinary field experts with more than (10) years of experience. The feedback from these 14 experts was instrumental in shaping the final questionnaire, ensuring that it was both comprehensive and focused on relevant aspects.

Pilot Study

This study carried out from (8 February / 2025) to (15th February/ 2025). After confirming the study tool's apparent validity, the researcher used it in a randomly selected exploratory sample of (15) disable people) physical disability), or roughly 10% of the total sample. Later, the participants in this sample were not included in the original sample used to conduct the final study. This study carried out from (8 February/2025) to (15th February/2025). After confirming the study tool's apparent validity, the researcher used it in a randomly selected exploratory sample of (15) disable people) physical disability), or roughly 10% of the total sample. The participants in this sample were excluded from the original sample utilised for the final study. The reliability of the questionnaire was assessed using Cronbach's Alpha, a statistical method for evaluating the internal consistency of items within each section. The coefficients were as follows:

- WHOQLE-BREEF: Cronbach's Alpha=0.861

- ADL: Cronbach's Alpha=0.854

These values indicate a good level of internal consistency.

Data Collection Method

The data were collected from the date (8 February 2025 to 1 April 2025) by using reconstructed questionnaire (Arabic version) to collect data as interview with disable people (Physical disability) responses were documented. After taking the formal approval from Director of the Babylon Health Department and the directors of the two previously mentioned centers and according to the permission and agreement of participation. The investigator obtained information from the participants. To obtain oral agreement, the researcher introduced herself to the participants and explained the goal of the study. The time to answer the instrument's questions with each participant took approximately (15-20) minutes

Statistical Data analysis

The data was analyzed and examined using SPSS V. 27. Descriptive statistics such as frequency counts and percentages, as well as measures of central tendency and variability be employed. Additionally, inferential statistics that are suitable for the distribution of the data be utilized. The statistical tests that applied to analyze the data of participants in the current study included Chi-Square test of association, Mann–Whitney U test, Kruskal–Wallis H Statistic, ANOVA, and T-Test.

Ethical Considerations of the Study

The ethical aspect of quantitative research is one of the most important elements of the study, which involves human participants, ensuring their protection and well-being and ensuring all ethical considerations for all participants. Consequently, verbal consent were acquired from the participants after the researcher introduced herself and elucidated the study's objectives, clarifying that the data would be utilized solely for research purposes. It was made explicit that participation was voluntary, allowing participants the freedom to accept or decline involvement in the study. All participant information was handled with stringent confidentiality, safeguarding the privacy and anonymity of all individuals involved. Also Phrasing the questions is easily understandable according to the educational level of participants and cultural background.

Table 1: Participants' distribution based on sociodemographic data.

Demographic Characteristics	Subgroup	f.	%
Age group	Young adult (18 – 24) years	17	11.3
	Adult (25 - 34 years)	19	12.7
	Middle age adult (35 - 44 years)	16	10.7
	Early middle aged (45 - 54 years)	28	18.7
	Late middle aged (55 - 64 years)	34	22.7
	Older adults (≥ 65 years)	36	24.0
	Total	150	100.0
	Mean ± SD 49.93 ± 17.149; Min- Max 18 - 78 years		
Sex	Male	114	76.0
	Female	36	24.0
	Total	150	100.0
Level of education	Not read or write	24	16.0
	Read and write	30	20.0
	Primary school	43	28.7
	Intermediate school	24	16.0
	Preparatory school	12	8.0
	Institutes graduator	7	4.7
	College graduator or above	10	6.7
	Total	150	100.0
Marital Status	Single	39	26.0
	Married	97	64.7
	Separated	4	2.7
	Divorce	2	1.3
	Widowed	8	5.3
	Total	150	100.0
Occupation status	Governmental employee	18	12.0
	Free job	11	7.3
	Retired	52	34.7
	Unemployed	40	26.7
	Housewife	24	16.0
	Student	5	3.3
	Total	150	100.0
Income	Sufficient	25	16.7
	Sufficient to some extent	92	61.3
	Insufficient	33	22.0
	Total	150	100.0
Residence	Rural	44	29.3
	Urban	106	70.7
	Total	150	100.0
Type of disability	Quadriplegia	12	8.0
	Right sided paralysis	13	8.7
	Left sided paralysis	15	10.0
	Lower limbs paralysis	32	21.3
	Lower right limb amputation	21	14.0
	Lower left limb amputation	19	12.7
	Lower both limb amputation	6	4.0
	Upper right limb amputation	4	2.7
	Upper left limb amputation	8	5.3
	Upper both limb amputation	5	3.3
	Others injuries	15	10.0
	Total	150	100.0
Duration of disability	≥ 1 year	24	16.0
	2 - 3 years	26	17.3
	≤ 4 years	100	66.7
	Total	150	100.0
Cause of disability	Congenital	18	12.0
	Traumatic	85	56.7
	Chronic disease	47	31.3
	Total	150	100.0
Are the basic materials or needs available for disabled people	Yes	16	10.7
	No	134	89.3
	Total	150	100.0

Results

The findings in Table 1 displayed the age 150 physical disable people at most (24%) more than 64 years (older adults) with a mean 49.93 years. Regarding the sex, the majority (76%) were male. The results showed the participants at most (28.7%) were graduate from primary school. According to the marital status, most (67.7%) were married and at most (34.7%) were retired and the most (61.3%) with sufficient to some extent. According to the residence, most (70.7%) from urban. Regarding to income, this variable has been self-reported by individuals involved in present study, it categorized according to their subjective estimation of whether their incomes meet the daily living requirements for three categories: Sufficient (participants revealed that their incomes meet all essential requirements without need further support), Sufficient to some extent (participants indicated that while their incomes cover basic requirements, but they sometimes exposed occasional shortfalls or limitations), and Insufficient (participants indicated that their incomes consistently fail to cover basic requirements); where 61.3% of participants were within Sufficient to some extent category.

Regarding the disability, the most (21.3%) have lower limbs paralysis, the most (66.7%) with more than four years and limbs paralysis, the majority (89.3%) not have the basic materials or needs available for disabled people (regular and electric wheelchairs, prosthetic limbs, prosthetic socks, quad crutches) .

The findings presented in Table 2 indicate that the QOL assessment for individuals with disabilities was moderate, with a mean score of 2.01 (Minimum - Maximum: 1 - 3). The Social relationship domain exhibited a higher percentage, with a mean of 2.56, while the physical health domain displayed a lower percentage, with a mean of 1.72.

The findings presented in Table 3 indicate that the evaluation of the ADL (Physical Aspects) for individuals with disabilities was moderate (Partially dependent), with a mean score of 1.92 (Minimum - Maximum 1 - 3). The Basic Activities of Daily Living domain exhibited a higher mean of 2.13, indicating less dependency, while the Instrumental Activities of Daily Living domain demonstrated a lower mean of 1.77, reflecting greater dependency.

Table 4's findings indicate that there were significant statistical variations among QOL for disable people with their income and type of disability at $P<0.05$.

Table 2: Assess the Quality of Life for Disable People

Items	%				Mean	Sd.	Ass.
	Always	Sometimes	Never	Total			
1. Physical pain preventing you from getting your work done (R)	56	30.7	13.3	100	1.57	.717	L
2. To what extent is there a need for any medical treatment to function in daily life? (R)	65.3	21.3	13.3	100	1.48	.721	L
3. I have adequate energy for daily tasks.	33.3	42	24.7	100	2.09	.759	M
4. To what extent do difficulties in movement affect your way of life (R)	68	26.7	5.3	100	1.37	.586	L
5. I feel satisfied with my sleep	36	30	34	100	2.02	.839	M
6. I have the ability to perform my daily living activities	24.7	36	39.3	100	1.85	.789	M
7. I feel satisfied with my capacity for work	19.3	24	56.7	100	1.63	790	L
Physical health domain: 7 items					1.72	468	M
1. To what extent do you enjoy life?	18.7	46	35.3	100	1.83	.718	M
2. I have ability to concentrate	26.7	38.7	34.7	100	1.92	.782	M
3. I have not ability to accept my bodily appearance (R)	31.3	34	34.7	100	2.03	.814	M
4. I feel satisfied with my self	49.3	32	18.7	100	2.31	.768	M
5. What is the frequency of experiencing negative emotions such as sadness, despair, anxiety, or depression? (R)	50.7	39.3	10	100	1.59	.667	L
6. I feel satisfaction about my health.	24	31.3	44.7	100	1.79	.805	M
Psychological health domain: 6 items					1.91	.401	M
1. How secure do you feel going about your everyday?	55.3	33.3	11.3	100	2.44	.690	H
2. I have physical environment is healthy	71.3	20	8.7	100	2.63	.640	H
3. How much available information do you need in your daily life	25.3	29.3	45.3	100	1.80	.819	M
4. I have the chance to engage in recreational activities.	34	35.3	30.7	100	2.03	.806	M
5. I feel satisfied with the condition of my living place	70	20	10	100	2.60	.666	H
6. I feel satisfied with my access to health services	27.3	22	50.7	100	1.77	.855	M
7. I feel satisfied with my transportation.	27.3	25.3	47.3	100	1.80	.843	M
Environmental health domain :7 items					2.15	.429	M
1. My personal relationships appropriate	69.3	21.3	9.3	100	2.60	.655	H
2. I have support from my family	78	14.7	7.3	100	2.71	.597	H
3. I feel satisfied with the support you get from your friends	54.7	28.7	16.7	100	2.38	.757	H
Social relationship domain :3 items					2.56	.524	H
Overall Quality of Life					2.01	3.15	M

Table 3: Assess the ADL (Physical Aspects) for Disable People

Items	%				Mean	Sd.	Ass.
	Dependent Completely	Need to Assistance	Independent Completely	Total			
1. Toilet (personal hygiene, using the toilet, getting on and off, and cleaning the genital area)	30.7	30.7	38.7	100	2.08	.832	P
2. Feeding (Eats with meal times)	19.3	16.7	64	100	2.45	.799	I
3. Getting dressed (Choosing clothes from closet, undresses and puts on clothes)	34	21.3	44.7	100	2.11	.883	P
4. Personal hygiene (hair, nails, hands, face, clothes)	29.3	24	46.7	100	2.17	.857	P
5. Physical Ambulation (travels around the grounds, city, and within the dwelling).	42.7	22	35.3	100	1.93	.883	P
6. Bathing (in tub, shower, sponge bath)	34	29.3	36.7	100	2.03	.843	P
Basic Activities of Daily Living: 6 items					2.13	.724	P
1. Telephonic Competence (Answers phone, looks up numbers, and operates phone independently.)	13.3	13.3	73.3	100	2.60	.714	I
2. Shopping (Take care of your shopping needs)	46	22.7	31.3	100	1.85	.870	P
3. Preparing Food (Meals must be made and served)	76	7.3	16.7	100	1.41	.761	F
4. Housekeeping (Carries out routine duties like washing dishes and making beds)	76	8.7	15.3	100	1.39	.741	F
5. Laundry (Does personal laundry)	74.7	8.7	16.7	100	1.42	.762	F
6. Mode of Transportation (drives one's own vehicle, takes public transit, or makes trip arrangements via taxi)	62.7	14.7	22.7	100	1.60	.835	F
7. Personal Responsibility for Medication (taking prescriptions at the appropriate times and in the appropriate dosages)	40	20.7	39.3	100	1.99	.894	P
8. Capacity to Manage Money (Manages financial affairs, such as creating budgets, writing checks, paying bills and rent, visiting the bank, and collecting and monitoring income.)	46	21.3	32.7	100	1.87	.880	P
Instrumental Activities of Daily Living : 8 items					1.77	.605	P
Overall Activities of Daily Living					1.92	.607	P

Ass.=Assessment items, F=Full dependent (1 – 1.66), P=Partial dependent (1.67-2.33) and I=Independent (2.34-3) (High score less dependent and low score more dependent).

The results also shown there were significant statistical negative correlation between Quality of Life for disable people with their age at P<0.05

In Table 5 the results shown there were significant statistical differences between physical aspect for disable people with their Level of education, Occupation status, Type of disability, and Cause of disability at P<0.05 .

Table 6 presents results indicating highly significant statistical positive correlation between physical aspects and quality of life for disabled people (r=0.481, p<0.05).

Discussion

Regarding the Socio-Demographic Characteristics, the current findings revealed that the research's mean ages of the study sample is 49.93 (± 17.149), and the age more than 64 years (older adults) were recorded as the highest percentage from all sample (150) physical disable people. The findings of this investigation were equal to those of the study carried out in Australia, in which results showed that the age of participants was between (60 - 69 years) old that constituted 22.20% and more than 70 years at 21.22% with mean age is 53.6 (18.5) from the whole sample. The large proportion of people in the study who were over 64 years old (i.e., the elderly category) may be due to several factors related to age and physical disability. For example, as people age, they become more susceptible to injuries or diseases that can lead to physical disabilities, such as stroke, heart disease, diabetes, and neurological diseases.[9] Regarding sex of the participants, were males found at highest rate (76.0%) compared with those who were females (24.0%), the result of a study conducted in Bulgaria agreed with results of this research and demonstrated that greatest percentage of the study sample were males compared with those who were females.[10] This can be justified by several reasons, as highlighted in the justification of the researcher. Iraq has experienced long wars and violent conflicts, such as the Iran-Iraq War, the Gulf War, the US occupation, and the war against ISIS. Most of the participants in these wars were men, leading to a high rate of disability among them due to direct injuries sustained in battle and explosions. Concerning the educational level, were primary school graduated. These findings agree with the study done in Iraq (Thi Qar) in which results showed that the greatest percentage of the research sample of primary school graduated[11]. Because of the conflict and instability, Iraqi schools generally lack adequate facilities. This implies that students with physical limitations might not be able to attend schools. Girls with disabilities are more likely to be denied a appropriate education, given that girls make up only 33% of the pupils enrolled in schools. Because schools are frequently hazardous, all pupils typically receive lower-quality instruction.[12]

Table 4: The Relationship Between Quality of Life for Disable People with their Demographical Characteristic

Demographic	Subgroup	Quality of Life		
		Mean	Analysis	P. value
Age group	Young adult (18 – 24) years	2.05	Cc=-.202-	.013[a]
	Adult (25 - 34 years)	2.12		
	Middle age adult (35 - 44 years)	2.13		
	Early middle aged (45 - 54 years)	1.95		
	Late middle aged (55 - 64 years)	2.06		
	Older adults (≥ 65 years)	1.88		
Sex	Male	2.00	T=-.740-	.460[b]
	Female	2.04		
Level of education	Not read or write	1.97	F=1.142	.341[c]
	Read and write	2.05		
	Primary school	1.95		
	Intermediate school	2.05		
	Preparatory school	2.01		
	Institutes graduator	1.97		
	College graduator or above	2.20		
Marital Status	Single	2.07	F=1.802	.132[c]
	Married	2.01		
	Separated	1.93		
	Divorce	1.59		
	Widowed	1.87		
Occupation status	Governmental employee	2.17	F=2.078	.072[c]
	Free job	2.00		
	Retired	2.04		
	Unemployed	1.93		
	Housewife	1.94		
	Student	2.17		
Income	Sufficient	2.19	F=7.961	.000[c]
	Sufficient to some extent	1.94		
	Insufficient	2.08		
Residence	Rural	2.05	T=1.017	.311[b]
	Urban	1.99		
Type of disability	Quadriplegia	1.97	F=2.321	.015[c]
	Right sided paralysis	1.96		
	Left sided paralysis	1.95		
	Lower limbs paralysis	2.02		
	Lower right limb amputation	2.08		
	Lower left limb amputation	2.05		
	Lower both limb amputation	1.77		
	Upper right limb amputation	2.18		
	Upper left limb amputation	1.96		
	Upper both limb amputation	1.58		
	Others injuries	2.19		
Duration of disability	≥ 1 year	2.06	Cc=-.001-	.991[a]
	2 - 3 years	1.92		
	≤ 4 years	2.02		
Cause of disability	Congenital	2.05	F=.414	.662[c]
	Traumatic	2.02		
	Chronic disease	1.98		
Are the basic materials or needs available	Yes	1.98	T=-.471-	.638[b]
	No	2.01		

Cc: Contingency Coefficient, Chi-Square test of association, ANOVA and T-Test were applied to analysis these data F: Full dependent

Individuals with a marital status of married were significantly represented in comparison to those who were single, divorced, widowed, or separated. The results align with the study conducted in Tehran, Iran which indicated that the majority of participants were married in comparison to those who were single, divorced, or widowed.[13] Regarding occupation, retired individuals comprised 34.7% of the total sample. The results of the current study align with those in Brazil, which concluded that only 17 individuals (10.4% of the sample) were included in the labour market with paid employment.

Table 5: The relationship between physical aspect (ADL) for disable people with their Demographical Characteristic

Demographic	Subgroup	Quality of Life		
		Mean	Analysis	P. value
Age group	Young adult (18 – 24) years	1.60	Cc=.034	.675[a]
	Adult (25 - 34 years)	2.08		
	Middle age adult (35 - 44 years)	2.09		
	Early middle aged (45 - 54 years)	1.86		
	Late middle aged (55 - 64 years)	1.97		
	Older adults (≥ 65 years)	1.91		
Sex	Male	1.91	Z=-.368-	.713[b]
	Female	1.97		
Level of education	Not read or write	2.15	H=13.829	.032[c]
	Read and write	1.93		
	Primary school	1.69		
	Intermediate school	2.05		
	Preparatory school	1.77		
	Institutes graduator	2.18		
	College graduator or above	2.15		
Marital Status	Single	1.82	H=3.533	.473[c]
	Married	1.99		
	Separated	1.80		
	Divorce	1.89		
	Widowed	1.71		
Occupation status	Governmental employee	2.06	H=15.074	.010[c]
	Free job	2.16		
	Retired	2.06		
	Unemployed	1.71		
	Housewife	1.88		
	Student	1.39		
Income	Sufficient	2.06	H=1.656	.437[c]
	Sufficient to some extent	1.88		
	Insufficient	1.92		
Residence	Rural	1.95	Z=-.368-	.713[b]
	Urban	1.91		
Type of disability	Quadriplegia	1.33	H=45.079	.000[c]
	Right sided paralysis	1.67		
	Left sided paralysis	1.66		
	Lower limbs paralysis	2.01		
	Lower right limb amputation	2.35		
	Lower left limb amputation	2.33		
	Lower both limb amputation	1.62		
	Upper right limb amputation	1.88		
	Upper left limb amputation	2.13		
	Upper both limb amputation	1.36		
	Others injuries	1.77		
Duration of disability	≥ 1 year	1.92	Cc=.085	.304[a]
	2 - 3 years	1.75		
	≤ 4 years	1.97		
Cause of disability	Congenital	1.67	H=7.694	.021[c]
	Traumatic	2.04		
	Chronic disease	1.80		
Are the basic materials or needs available	Yes	1.96	Z=-.216-	.829[b]
	No	1.92		

Cc: Contingency Coefficient, Z: Z-score, H: Kruskal–Wallis H Statistic, Chi-Square test of association, Mann–Whitney U test, and Kruskal–Wallis H Statistic were applied to analysis these data. A=P. value was calculated by Spearman's correlation coefficient, B=P. value was calculated by Mann-Whitney U, and C=P. value was calculated by Kruskal-Wallis H

Table 6: The Correlation between Physical and Quality of Life for Disable People

N=150	Quality of Life	
	Cc	P value.
Physical Aspects	.481	.000*

* Significant at P ≥ 0.05, Cc=Contingency Coefficient, P=probability value

The remaining individuals are categorized as retired, engaged in household activities, receiving disability benefits, and unemployed.[14] The presence of a majority of retirees in the Iraqi physical disability study sample may be due to several social, economic, and health factors specific to Iraq. Justification of the researcher highlights that among these factors is that Iraq has experienced wars and conflicts over the years. Many retirees may suffer from physical disabilities as a result of injuries sustained during their military or civilian service, making them a significant portion of the research sample. The majority of the study sample reported an income level that was sufficient to some extent. The findings align with the study conducted in Mansoura, Egypt, which indicated that the majority of participants reported an average monthly income, a suitable monthly income, and a low monthly income.[15] Individuals with disabilities are more prone to experience poverty, possess diminished economic opportunities, and suffer from poorer health compared to those without impairments.[12] Concerning residence, the majority of study individuals reside in an urban region. The findings aligned with the research conducted in Iraq (Thi Qar), which indicated that the majority of participants resided in an urban region.[11] This study is due to the nature of urban society compared to rural society, which is prone to accidents, health and social problems, and high levels of pollution, which can increase the rates of motor disability.[15] In concerning to the type of disability, Lower limbs paralyses of participants were found at high rate. Regarding the type of disability, 58% of participants presented plegia (Lower limbs paralysis); 26.2% paresis (Left and Right paralysis); and 15.8%, amputations In *Brazil (*Itajaí/SC*)*, this also congruent the results of the current study.[14] The high proportion of people with lower limb paralysis in the study sample may be due to a combination of factors related to trauma from war, traffic accidents, physical injuries from physical work, or diseases affecting the central nervous system. According to duration of disability, the highest percentage of study are with more than four years. This study supported by the study conducted study in Egypt, which showed that highest percentage of study are with more than two years.[6] Regarding the causes of disability, the majority of the study sample was affected by traumatic injuries. The researcher believes that traumatic causes include disabilities resulting from wars, work-related accidents, and road traffic accidents. The security situation in Iraq, terrorist attacks, the multiple wars that Iraq has fought over the past 30 years, as well as work-related and traffic accidents, could all be contributing factors to this outcome. This result is consistent with the study conducted in Iraq (Thi Qar.[11] In terms of basic materials or needs of the participants, the highest percentage of the study sample were not have the basic materials or needs available for disabled people. However, Iraq's healthcare system lacks infrastructure, equipment, and security due to issues including war, neglect, economic sanctions, and the degradation of medical facilities.[12]

According to the Quality of Life for Disable People, the current study indicates a reasonable overall quality of life for individuals with disabilities, with a mean score of 2.01 (range 1 - 3) across all linked items. The Social relationship domain exhibited a greater percentage, with a mean of 2.56, but the physical health domain displayed a lower percentage, with a mean of 1.72. Moderate levels among individuals with physical disabilities. A study conducted in Bulgaria concluded the QoL of the respondents vary between the low and middle level.[10] These findings corroborate those of the current study, which found that Eastern Europe appears to have one of the highest burdens of health repercussions following the shift. The significant shifts in health, higher education, and social security Alongside healthcare facilities have come hitherto unseen issues, such as poverty, joblessness, the demographic crisis, and an overall decrease in quality of life. These procedures resulted in the breakdown of interpersonal relationships, social capital, and mutual trust—all of which are essential for the well-being of both individuals and societies.

Concerning the physical aspects for individuals with disabilities, the findings of the current study indicate a moderate level of partial dependence or need for assistance across all questions related to this topic, with a mean score of 1.92. The Basic Activities of Daily Living domain exhibited a higher percentage, indicating less dependency. Conversely, the Instrumental Activities of Daily Living domain demonstrated a lower percentage, reflecting greater dependency. The findings of this study align with the research conducted in India, which indicated that 11.5% of respondents required assistance in one of the ADL domains.[16] A study conducted in Nigeria, similar to this one, reported that 28.3% of respondents required assistance in one domain. The primary factor may be the predominance of the geriatric population in the Nigerian study [17.] The study conducted in Egypt revealed that the highest percentage of the soldiers examined (49%) engaged in good daily activities, while 41.5% exhibited average daily activities.[6]

In The context of Discussion of the Relationship between Quality of Life and Demographical Characteristic, the results presented in table (4) indicate that there are significant statistical differences in the Quality of Life for individuals with disabilities, correlated with their income and type of disability, at $P<0.05$. The results also indicated a significant statistical negative correlation between the Quality of Life for disabled individuals and their age at $P<0.05$.

The findings of this study align with those studies conducted in India, where it was observed that males exhibited a decline in Quality of Life scores for disabled individuals as age increased, and this trend was statistically significant across the age groups ($p<0.05$).[18] The results of this study were inconsistent with the findings of the study conducted in Egypt, which indicated no significant differences ($P<0.05$) between the demographic variables (age, family income, education level, type of physical disability) and the overall quality of life for individuals with physical disabilities.[19]

With respect to the relationship between physical aspect (ADLS) for disable people with their Demographical Characteristic, the results shown there were significant statistical differences between physical aspect (ADLS) for disable people with their Level of education, Occupation status, Type of disability, and Cause of disability at $P<0.05$. In the study conducted in Brazil (Itajaí/SC), congruent with results this study in the distribution of average scores among individuals with physical disabilities, 50% of the sample scored above six, and 67% scored above five, with notable variances in mean independence scores based on employment and kind of disability.[14] A comparable study conducted in Sri Lanka indicated that low educational attainment, inadequate finances, and deficient social support networks negatively impact the performance of Activities of Daily Living.[20] A separate study conducted in Turkey established the correlation between types of physical disabilities and IADL scores among the elderly, as evaluated by multivariate binary logistic regression analysis (Enter method).[21]

The analysis of correlation between physical and quality of life for disable people presents highly significant statistical positive correlations between physical aspects and quality of life for disabled individuals at $p<0.05$. The study conducted in Australia corroborates this research, demonstrating a statistically significant and positive association between adherence to the recommended level of physical activity and quality of life.[22] A previous study identified that impairments in performing activities of daily living, including hygiene and dressing, significantly contributed to reduced quality of life in individuals with upper limb post-stroke spasticity.[23]

Strengths Points of Current Study

• It addresses a sensitive humanitarian and societal issue that contributes to improving the quality of life for people with disabilities.

• Novelty of the proposal: Focusing on physical health and quality of life together provides a comprehensive and integrated perspective on the lives of people with disabilities.

• Possibility of practical application: Its results may be used in developing physical rehabilitation programs for them.

• There is a clear knowledge gap: Most studies focus on one aspect, either quality of life or the physical aspect, while our research combines them.

• Raising community and institutional awareness to support people with disabilities and improve their quality of life.

Limitation Points of Current Study

• Possibility of bias: The research sample may represent a specific region or culture, limiting generalizability.

• Lack of previous Arab and local studies: Limited sources in Arabic or within the Iraqi context that address the quality of life of people with disabilities, including physical aspects, make it difficult to compare the results with local literature and discuss them within the Iraqi and Arab cultural and social framework.

• Relatively small sample size: Although the sample included 150 individuals, this number may not be sufficient to represent all people with disabilities, regardless of their categories or types of disabilities, limiting the possibility of generalizing the results to the larger community.

Conclusion

Nearly all of the study sample's participants were old married men (those over 64 years old). The largest percentage of the study population had only completed primary school. The majority of them were retired from their jobs and made enough money each month.

Traumatic damage was the main cause of the disability. Participants lacked the essential supplies or equipment needed for those with disabilities, such as quad crutches, prosthetic limbs, socks, and conventional and electric wheelchairs. It was determined that people with impairments had a moderate quality of life and that their level of physical activity in daily life was moderate (partially dependent). When connected favorably with physical attributes, people with physical limitations reported a significantly improved quality of life. Significant statistical differences were found between the quality of life of individuals with physical disabilities and certain participant demographics, including age, income, and disability type. They are the main target problem in our study.

Recommendation

The Iraqi Ministry of Health should therefore take aggressive measures to guarantee the availability of necessary tools and resources for people with physical disabilities, the study advised. Additionally, integrating people with disabilities into all facets of life by encouraging educational, career, and vocational training opportunities that cater to their requirements and making physical surroundings (public buildings, transportation, and facilities) accessible and appropriate.

The Statement for Conflict of Interest

We declared that the conducted current investigation is free of any conflicts of interest. There are no financial and individual affiliations have affected design, accomplishment, and the analysis of present work. Moreover, we confirm that no AI tools or automated systems were applied in modeling, writing, and analysis of current study. All outcomes and conclusion were depending on objective academic investigation.

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Conflict of Interest

The authors declare no competing interests.

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