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ORIGINAL RESEARCH

Factors Affecting Psychological Distress among Caregivers of Children with Special Needs

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ABSTRACT

Background: Primary caregivers or parents play critical role in managing broad group of children who require particular educational, social, and medical treatments due to physical, cognitive, and mental disabilities, which may contribute to impairment in family well-being and impairments in quality of life for both child and their family. It is common for caregivers of children with special needs to feel more psychological stress.

Objectives: The aim of the study was to assess of psychological distress among caregivers of children with special needs and find out the relationship among psychological distress and socio-demographic characteristics.

Methodology: The current study utilized a descriptive (cross-sectional) design was conducted on (111) study sample included all caregivers who attended seven institutes (Al-Amal Institute for deaf, Al-Noor Institute, Al-Raja Institute, Al-Rayahin Institute, Al-Mustakbal Institute, Al-Saada Institute for Autism, and Al-Amal Institute for Impaired hearing) from 12 November 2025 to 15 January 2026. A purposive non-probability sampling was used. Furthermore, a adopted two tools used: Kessler scale, a personal and clinical characteristics for child and personal characteristics for caregivers questionnaire sheet was added. Data were analyzed using descriptive statistics and Kruskal-Wallis H test to determine the statistical differences and relationship.

Results: The results of the study revealed the majority of caregivers of children with special needs who participated in this study have moderate level of psychological distress with mean of scores (25.64). There is a non-significant relationship between Psychological Distress for caregivers and their socio-demographic trait such as age, sex, level of education, monthly income at ($P<0.05$).

Conclusion: The findings of this study conclude caregiving for child with special needs stress factor in itself, regardless of the social, economic background of caregivers. Therefore, providing families with educational programs helps increasing caregivers' awareness about causes, signs and symptoms and how to relief stress by using Coping strategies.

Keywords: Psychological Distress, Caregivers and Children with special needs.

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INTRODUCTION

Children who have physical, mental, emotional, or developmental problems and need special services, care, and education are referred to as children with special needs (CSN) (Billawala et al., 2018). The World Health Organization (WHO) defines CSN as children who struggle with mental and physical functioning and need specialized assistance to fulfill their potential in a variety of areas of life (WHO, 2018). The term refers to a wide range of conditions, including physical disabilities, autism spectrum disorders, intellectual disabilities, and sensory impairments (Babulicova & Polackova, 2024). Globally, UNICEF estimated that 28.9 million (4.3%) children aged 0-4 years, 207.4 million (12.5%) children aged 5-17 years and 236 million (10.1%) children aged 0-17 years have moderate-to-severe disabilities based on household surveys of child functional status. Using the UNICEF estimated prevalence of 10.1%, approximately 266 million children aged 0-19 years are expected to have moderate-to-severe disabilities (Olusanya et al,. 2022). Approximately 19% of children under the age of 18 in the US have special healthcare requirements, according to statistics from the National Survey of Children with Special Health Care requirements (NS-CSHCN) (Ghandour et al., 2022). According to the multiple indicator cluster survey in Iraq (UNICEF, 2018) estimated about 1.3 million (8%) of Iraqi children between 2-17 years old suffering from functional difficulties. A caregivers of children with special needs are mostly people who continuously assist a child with necessary emotional, physical, and psychological difficulties in their daily activities in addition to providing support (Coleman et al., 2022). Social support played a protective role in mitigating the psychological distress caused by stigma, though it could not eliminate its adverse effects. These findings highlight the pressing need for more effective social support systems, increased public awareness, and early interventions to reduce stigma-related distress (Lin et al,. 2025). Enhancing support for caregivers of children with ASD is essential for improving their mental health and overall life satisfaction (Chen & Tian, 2025). Access to external social support, such as friends, family, and local organizations, self-compassion, and emotional intelligence has been linked in studies to reduce stress and improved mental health outcomes for caregivers (Findling et al., 2023) (Lone et al., 2024). Parental stress mitigating through strengthening role of social network (Ramirez & De Leon, 2025). Psychological distress refers to the emotional suffering typified by anxiety and depression; the American Psychiatric Association (APA, 2018) specified psychological distress as "a set of symptoms and experiences that are held to be annoying, troubling, or out of the ordinary " (Abdulameera & Al-Dujaili, 2022). The impact of variables such caregiver age, sex, family dynamics, educational and economic background, residency and employment position on how caregivers handle the stress and responsibilities of their caring roles has been highlighted in prior research (Machado et al., 2018) (Caga et al., 2021). Mothers of children with special needs require resilience to mitigating psychological distress and challenges that impact of mental health well-being (Almheiri et al,. 2023). Despite many studies in psychological distress tend to focused on mothers caregivers, on the other hand few studies tend to highlighting the experiences of fathers of children with developmental disabilities. Study on fathers of children with developmental disabilities found positive relationship between stress and stigma (Manor-Binyamini. 2024). Initial diagnosis and treatment for children with chronic health conditions significant interfere with psychosocial challenges for affected children and their families (Thomas et al., 2024). As a result of the stress, burdens, and challenges that families have experienced since their child was diagnosed, it is necessary to concentrate on cognitive-behavioral

therapy (CBT) is a psychiatric treatment which focuses on how link idea, feeling, behaviors. such as meditation, guided visualization, and relaxation, and apply them to your everyday activities (Clark et al., 2019).

AIMS OF THE STUDY

The aim of the study was to assess of psychological distress among caregivers of children with special needs and find out the relationship among psychological distress and socio-demographic characteristics.

METHODOLOGY

Design of the study: A descriptive design cross-sectional study, used assessment approach with questionnaire items was conducted to assess the effect of psychological distress on caregivers of children with special needs for the period from (12/11/2025 to 15/1/2026) on a sample of caregivers of children with special needs.

Setting of the study:

The study has been carried out at Al-Najaf province in seven institutes related to the Department of Care for Special Needs at Al-Najaf Al-Ashraf City, Ministry of work and Social Affairs, Iraq (Al Amal Institute for Deaf, Al-Raja Institute for Mental Retardation, Al-Noor Institute for the Blind, Al-Amal Institute for Impaired hearing and speech, Al-Mustakbal Institute for Physical Disability, Al-Saada Institute for Autism, Al-Rayahin Institute for Cochlear Implant).

Sample of the study:

A non-probability purposive sample were composed of (111) caregivers of children with special needs who participate in the study were selected from Al-Amal Institute for deaf were (22) sample, Al-Raja institute were (15) sample, Al-Rayahin Institute were (30) sample, Al-Noor Institute were (12) sample, Al-Mustakbal Institute (11) sample, Al-Saada Institute (11) sample, Al-Amal Institute for Impaired hearing and speech (10) sample, Sample size calculated through Stephen Thompson's equation with an 80% confidence level. And 14 child was excluded from the pilot study. this sample is selected according to which include the following criteria:

A. Inclusion Criteria for Sample Selection:

1. Caregivers who provide care directly and attached to child with special needs about 16 hours/ day.
2. Caregivers of children suffering from neurodevelopmental disorders such as Autism Spectrum Disorder, Intellectual Disability, Downs Syndrome, Deaf, Blind, Physical Disability, Impaird Hearing and speech.
3. Both genders (male and female).
4. Caregiver had to provide verbal approval and desire to participate in the study.
5. All children and their families are from Al-Najaf city and live within the geographical area served by the rehabilitation center.
6. Caregivers with Arabic Nationality, this facilitate communication with caregivers.

B. Exclusion Criteria for Sample Selection:

1. Caregiver who selected to piolet study.
2. Caregiver age less than 18 years and more than 65 years because Brife COPE Scale for individual above 18 years.
3. Caregiver who register their children in private institutes.

Instrument of the study:

It was composed from three main parts:

Part I: Socio-demographic Characteristics:

The first part consist of two dimensions: Child's Socio-demographic characteristics, Caregiver's Socio-demographic Characteristics:

Child's Socio-demographic Characteristics:

This dimention consists of (6) items on children with special needs characteristics including chronological Sex, Child's age, Type of disability, Degree of disability, Duration of disability, Child age at diagnosis.

Caregiver's Socio-demographic Characteristics:

This caregiver partition is consist of (8) items: caregiver of child, Caregiver sex, Age, Consanguinity

relationship between mother and father, Marital Status, educational level, Monthly income, Residency.

Part II: The Kessler Psychological Distress Scale (K 10):

An instrument called the Kessler Psychological Distress Scale (K 10) was designed to produce a global measure of general psychological distress based on questions about anxiety and depressive symptoms that that a person had experienced in the previous four weeks. The K10 involves 10 questions about emotional states each with a five responses. Content validity used through panel of (15) experts from medical and nursing specialties, each expert examining instrument content and gave their valuable comments. The internal consistency reliability was used to assess the reliability of the Kessler 10 scale (Alpha Cronbach technique).

Rating and Scoring:

The Kessler Psychological Distress Scale is a 10-item questionnaire. Respondents indicate whether they have five-point type Likert scale is scored as: (1) none of the time, (2) little of time, (3) some of the time, (4) most of the time, and (5) all of the time. The elements on the (K10) are totaled to produce total scale scores, with highest scores was (50) representing maximum level of psychological distress. Lowest scores (10) indicate minimum levels of psychological with mean of score ranged (MS= 10-19 that indicate that to be well; MS =20-24 indicate Likely to have a mild disorder; MS = 25 – 29 Likely to have a moderate disorder; MS = 30 – 50 indicate to have a severe disorder).

Data Collection

The data were collected through of all study participants using a developed questionnaire and a self-administered questionnaire from 1 December, 2025 until 2 January, 2026. After obtaining the approval of the Directorate of work and Social Affairs, Department of Care for Special Needs. The researcher has met each caregiver separately by utilize face-to-face interview for the socio-demographics data and self-administer report for Kessler Psychological Distress Scale by using the original version and translated to Arabic language by using forwards and backwards translation process. The participant needed approximately (10-15) minutes to complete the questionnaire and answer all the questions of Kessler Psychological Distress Scale. Totally, the number of questionnaires collected and were usable for statistical analysis were (111) samples, while 15 questionnaires were invalid due to mistakes in the filling scale items, and the socio-demographic data were missing in 5 questionnaires.

Ethical Considerations:

The University of Kufa's ethical committee accepted this study, and it was carried out in compliance with the committee's guidelines. All of the caregivers gave their informed consent to guarantee their voluntary involvement.

Statistical Analysis:

The following statistical tests were applied to analyze and organize the data by using the Statistical Package for the Social Sciences (SPSS) version. (19), and Microsoft Excel (2010):

1. **Descriptive Data Analysis:**

Tables (Frequencies, and Percentages), Statistical figures (Bar Charts), Statistical mean and standard deviation.

2. **Inferential Data Analysis:**

Kruskal-Wallis H test: to determine the statistical differences and relationship between coping strategies among caregivers of children with special needs for child and caregiver socio-demographic characteristics (child age, sex, type of disability, degree of disability, duration of disability, child's age at diagnosis, caregiver of child, caregiver's sex, caregiver's age, consanguinity relationship between mother and father, marital status, level of education, monthly income, residency).

RESULTS

Table (1) demonstrates the frequency distribution of socio-demographical characteristics of the children with special needs. The study results indicate the highest percentage of children with special needs are male (59.5%) whereas the most of children with special need (55.9%) are within (11-16) years. Regarding type of disability the study result indicates that highest percentage of the children with special needs are Cochlear Implant about (27%); followed by Deafness (19.8%); followed by Visual loss (10.8%); followed by Physical Disability and Autism at the same percentage (9.9%); followed by Hearing Impairment (9%); followed by Down syndrome (7.2%); and finally Mental retardation (6.3%). Concerning Degree of disability about half (48.6%) moderate, Duration of disability 48.6% more than 10 years, the majority of age of child at diagnosis (years) approximately (62.2%) less than one years old whereas the minority of them (2.7%) are more than four years old.

Table (2) illustrate the frequency distribution of demographic features among the study sample, that shows the majority of the study sample (76.6%) concerning the child's caregivers are mother. In addition, the highest percentage of the study sample (41.4%) in the age group less than 35 years old. In regard to Consanguinity Relationship, the table shows (70.3%) of the sample there is a degree of kinship between the parents. Additionally the marital status for caregivers more than (90%) of them are married. According to the level of education, the highest percentage of caregivers (36.9%) graduated from primary school; followed by (24.3%) of graduated from secondary school; followed by (18%) of Literate (read and writes); followed by (14.4%) of graduate of Institute/ College; finally (6.3%) Illiterate (not read and write). Concerning the Monthly Income approximately (50%) of caregivers are insufficient. And finally residence, about (92%)of the sample are occupants of urban areas.

Table (3) provides the overall assessment (mean and ratio of scores) of Kessler Psychological Distress Scale for the study subjects. They show that the overall assessment of Kessler Psychological Distress Scale (moderate) with mean of scores = 25.64. Figure (1) advance the descriptive statistics of caregiver's subgroups according to their total score of Kessler Psychological Distress Scale . They reveal that the highest of caregiver have (severe Disorder) level of Kessler Psychological Distress Scale assessment (30.6%); while (26.1%) of them have (moderate disorder) level of Kessler Psychological Distress Scale assessment; only (23.4%) of them have (mild disorder) level of Kessler Psychological Distress Scale assessment; and finally (19.8%) of them have (be well) level of Kessler Psychological Distress Scale assessment.

The results in table (4) demonstrates that there are no statistically significant differences and relationship between Caregivers' Psychological Distress and socio-demographic characteristics of the children studied at ($P < 0.05$). Since the Kruskal-Wallis test was applied due to the absence of a normal distribution.

Table (5) presented that there is a non-statically significant differences between overall assessment of kessler psychological distress scale for caregivers and their Socio-demographic Characteristics (at $P<0.050$), although there were some variation in the mean ranks among the groups. as all p-values were greater than 0.05.

DISCUSSION:

The results of the current study show that the majority of sex variable regarding children were males 59.5%. This result may be because study sample in this time found males children were more than the females children. This finding is consistent with Abdel Aziz & Abd Elaziz, (2024), who found that nearly two-thirds (63.3%) of his samples were males and (36.7%) of them were females. Moreover. Iraqi study by Samadi et al., (2022), reported the sex ratio

for the children with special needs was 78% male vs. 22% female. Where the researcher chooses this ratio to be compatible with DSM-5-TR (2022) approximately 4:1 male to female.

Regarding the age of children above half of children fall in the age group (11-16) years old (55.9%). These findings align with a study by Qasim et al., (2022), from medical city hospital in Baghdad found that 60.4% of children with severe deafness received cochlear implants, while the remainder used hearing aids . From the researcher's point of view only 9.9% diagnosis of autism due to limited awareness, diagnostic capacity, social stigma in Iraq, the data cannot be considered representative of the broader population of children with disabilities in Iraq. Also, many children have moderate to severe disability (48.6% moderate, 42.3% severe). And nearly half (48.6%) had lived with the disability for more than 10 years, suggesting many children are living with disability long-term. Also, a majority were diagnosed very early (in the first year of life 62.2%) many children with congenital disabilities (Down syndrome, Congenital deafness, Congenital physical disability) are likely diagnosed early although there is no national Iraqi dataset to confirm if this early diagnosis pattern holds broadly. In the other hand, that the majority of caregivers were mothers (76.6%), this findings have shown that these mothers are responsible for their children's care more than fathers. In the researcher point of view that is in our culture, fathers generally play a secondary role in the care for children or sometimes no role at all because they spend more of their time at work, while mothers are responsible for the household and child care. This result come along with Abdulameera and Al-Dujaili (2021) who found that the majority of parents (75.4%) were female (mother).

Regarding the age of caregivers, the predominant age group of the study sample (41.4%) is within less than or equal (35) years old. This result is backed up with Abdulkazam and Al-Dujaili (2022) who found that a higher percentage (46.2%) is between (27-36) years old.

The present study finding revealed that about three quarters of the study sample (70.3%) had Consanguinity relationship between mother and father. This result is in-line with Abdel Aziz who found that more than half (58.3%) of subjects had consanguinity relationship between mother and father (Abdel Aziz et al., 2024).

In regard to Marital Status, table (2) show that (92.8%) of them were married. This result is consistent with researcher culture; where both males and females marry early. These finding are confirmed by Esmael et al., (2025), who reported all samples (100%) were married. The requirements of daily life children with special needs are many, and this requires the cooperation, intensification, and efforts of the father and mother together in caring for the child. Although there are great family problems such as domestic family, and emotional problems, but as a result of the child's need for them, they remain married despite the suffering.

Concerning the level of educational, the current study illustrates that the highest percentage of the study sample was graduate from primary school. This result indicated the low educational level of parents which places additional burden related to caregivers' culture. In the same context a cross-sectional study with 330 caregivers of children with special needs at Turkey which found the highest percentage was primary education 34.8 (Özdemir et al., 2022). Also, Abdel Aziz et al., 2024), agreed with the current result, they reported that the majority of parents were from low levels educational, observed that 70% Basic education., the researcher found when educational level is high (Bachelor's or higher degree), has a direct impact on the child in terms of early diagnosis and early intervention, and improve quality of life, and the opposite when the level of educational is very low, so the educational level of parents is very important.

Concerning occupation, because the majority of caregivers were female, that lead to more than two

third of them housewife (71.2%). These result supported by Esmael et al., (2025), who found the highest percentage (69.1%) of the studied samples were house wife.

Concerning monthly income, the highest percentage of study is recorded nearly half of parents income were insufficient. In contrast the results reported by Al-Mossawy and Al-Dujaili, (2017), where their results presented that the high percentage of the monthly income of caregivers less than half (44.1%) was sufficient. It was known that most of the parents of children with special needs suffer from great financial hardship, as a result of their continuous financial care for their child, and this care costs them a lot of money in order for their child to improve and become a normal child.

Residency area, the study result shows that the majority of the children family participate in the study (95%) were urban residents, while only (5%) of them were rural residents. This result matches with the result of (Lone et al., 2024), reported same outcome. This makes sense because rural area in Iraq had less chances than urban area. Also this could be because most Schools and institutes of children with special needs were located in the center of the city, and more families prefer to care near or in the same area.

Table (3) reveals that the majority of the caregivers participating in the study sample use it items numbered (1,2,8) severe, while it is considered (moderate) for the items numbered (5,7,9), and mild for the items (3,4,6) and likely to be well for item (10). This assessment is based on the statistical scoring system that indicated total mean of scores between (10-19) as (well); and those between (20-24) as (mild); and those between (25-29) as (moderate), those with scores more than (30) as (severe).

CONCLUSIONS:

The study concluded that most of the caregivers were to have moderate psychological distress. And there are no statistically significant differences and relationships between caregivers' psychological distress and socio-demographic characteristics for children and their caregivers.

RECOMMENDATIONS:

1. Further studies with large sample size of similar studies involving the largest possible number of children with special needs.
2. Creat an accurate database for number of children with special needs through further research, in the form of a survey , should be performed in Iraq.
3. Establish educational or instructional programs to increase knowledge about how to manage psychological stress and how to deal with special needs children.

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TABLES & Figures:

Table (1): Socio-demographical Characteristics of the Children with special needs

Socio-demographic Characteristics	Rating and Interval	Freq.	%
Sex	Male	66	59.5
	Female	45	40.5
Child's age (years)	<= 5	6	5.4
	6 - 10	43	38.7
	11+	62	55.9
Type of disability	Cochlear Implant	30	27.0
	Deafness	22	19.8
	Down Syndrome	8	7.2
	Mental Retardation	7	6.3
	Physical Disability	11	9.9
	Hearing Impairment	10	9.0
	Visual Loss	12	10.8
	Autism	11	9.9
Degree of disability	Simple	10	9.0
	Moderate	54	48.6
	Severe	47	42.3
Duration of disability	Less than 5 years	11	9.9
	5 - 10 years	46	41.4
	More than 10 years	54	48.6
Child's age at diagnosis (years)	<= 1.00	69	62.2
	1.01 - 2.00	20	18.0
	2.01 - 3.00	13	11.7
	3.01 - 4.00	6	5.4
	4.01+	3	2.7

Table (2): Socio-demographical Characteristics for Caregivers of children

Socio-demographic Characteristics	Rating and Interval	Freq.	%
Caregiver of children	Father	26	23.4
	Mother	85	76.6
Caregiver sex	Male	26	23.4
	Female	85	76.6
Caregiver age	<= 35	46	41.4
	36 - 45	36	32.4
	46 - 55	25	22.5
	56+	4	3.6
Degree of kinship between mother and father	Yes	78	70.3
	No	33	29.7
Marital status	Single	1	0.9
	Married	103	92.8
	Divorced	3	2.7
	Widowed	3	2.7
	Separated	1	0.9
Educational level	Do not reads and writes	7	6.3
	Reads and writes	20	18.0
	Primary school graduate	41	36.9
	Secondary school graduate	27	24.3
	Institute graduate	16	14.4
Monthly income	Sufficient	14	12.6
	Barely sufficient	42	37.8
	Not sufficient	55	49.5
Governorate	Inside Najaf Governorate	106	95.5
	Outside Najaf Governorate	5	4.5
Residency	Urban	102	91.9
	Rural	9	8.1

Table (3): Overall Assessment of the Psychological Distress among caregivers of children with special needs

Levels	Freq.	%	Ms.	Asses.
Likely to be well	26	23.4	25.64	Likely to have a moderate disorder
Likely to have a mild disorder	29	26.1		
Likely to have a moderate disorder	22	19.8		
Likely to have a severe disorder	34	30.6		

Freq.: Frequency; MS.: Mean of Scores; Likely to be well: MS = 10 – 19; Likely to have a mild disorder: MS = 20 – 24; Likely to have a moderate disorder: MS = 25 – 29; Likely to have a severe disorder: MS = 30 – 50.

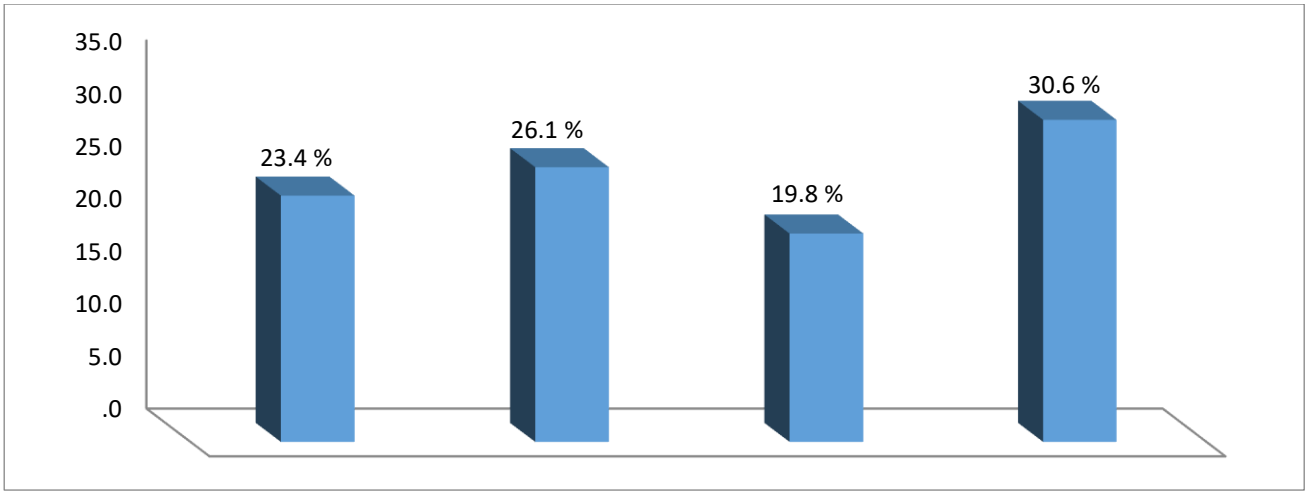

Figure (1): illustrate the percent of the Psychological Distress Levels among caregivers of children with special needs

Table (4): Statistical differences and relationship between Caregivers' Psychological Distress and the Childs' socio-demographical Characteristics

Socio-demographic Characteristics	Rating & Intervals	Mean Rank	Kruskal-Wallis H	p-value
Sex	Male	55.52	0.04	0.85
	Female	56.71		
Type of disability	Cochlear Implant	49.12	8.80	0.27
	Deafness	60.36		
	Down Syndrome	65.44		
	Mental Retardation	63.79		
	Physical Disability	53.50		
	Hearing Impairment	46.00		
	Visual Loss	47.25		
	Autism	75.36		
Degree of disability	Simple	46.65	0.98	0.61
	Moderate	57.62		
	Severe	56.13		
Duration of disability	Less than 5 years	53.64	0.12	0.94
	5 - 10 years	55.46		
	More than 10 years	56.94		
Child's age at diagnosis (years)	<= 1.00	56.15	0.65	0.96
	1.01 - 2.00	57.75		
	2.01 - 3.00	49.96		
	3.01 - 4.00	58.75		
	4.01+	61.50		
Child's age (Binned)	<= 5	49.42	0.87	0.65
	6 - 10	59.31		
	11+	54.34		

*** Significant at P<0.05; Normal distribution has not been achieved.**

Table (5): Statistical differences and relationship between Caregivers' Psychological Distress and their socio-demographical Characteristics.

Socio-demographic Characteristics	Rating & Intervals	Mean Rank	Kruskal-Wallis H	p-value
Child's caregiver	Father	59.90	0.50	0.48
	Mother	54.81		
Caregiver sex	Male	59.90	0.50	0.48
	Female	54.81		
Caregiver age (years)	<= 35	52.92	1.25	0.74
	36 - 45	56.36		
	46 - 55	59.18		
	56+	68.25		
Degree of kinship between mother and father	Yes	56.81	0.17	0.68
	No	54.09		
Marital status	Single	76.00	4.08	0.39
	Married	55.16		
	Divorced	74.83		
	Widowed	73.50		
	Separated	14.00		
Educational level	Do not reads and writes	50.00	2.51	0.64
	Reads and writes	64.88		
	Primary school graduate	52.09		
	Secondary school graduate	55.28		
	Institute graduate	58.78		
Monthly income	Sufficient	50.39	3.06	0.22
	Barely sufficient	50.82		
	Not sufficient	61.38		
	Outside Najaf Governorate	26.10		
Residency	Urban	56.82	0.82	0.37
	Rural	46.72		

Significant at P<0.05; Normal distribution has not been achieved.