International Journal of Psychosocial Rehabilitation, Vol.24, Issue 02, 2020
ISSN: 1475-7192

Relationship between Psychological Adjustment and Life Satisfaction among Caregivers of Children with Intellectual Disabilities

[1] Karrar Habib Abd Ali Al-Hasnawi, [2] Arafat Hussein Al Dujaili

ABSTRACT:

Intellectual disabilities (IDs) are permanent disabilities that appear during the developmental years and characterized by limitations in adaptive behaviors and below-average general intellectual functions intelligence quotient (IQ) below (70), are very common among children around the world, and the rates of greater children survive are likely to increase through improved medical care. Besides, intellectual disabilities are considered the most common serious developmental disabilities. The birth of a disabled child creates a significant impact on the parents, as shown by many studies, most of which focused on the psychological adjustment of the parents. The importance of this issue lies in the adjustment difficulties which existing in parents having a disabled child. Effective parenting is essential to the intellectual, physical, social, and emotional development of a child. The psychological adjustment of the parents of children with IDs has a significant impact on the child's development regardless of the child's intellectual functioning. ***Aim of the study:*** *This study aims to assess the levels of psychological adjustment and life satisfaction among caregivers of children with intellectual disabilities, and determine the relationship between psychological adjustment and life satisfaction among caregivers of children with intellectual disabilities.* ***Research design:*** *A Study and descriptive (correlation) quantitative design was utilized in order to achieve the objectives of this study. from the period of 15 th October 2019 to 9 th September 2020.* ***Study setting:*** *The study was conducted at AL-Najaf city \ AL-Raja Institute and Dema Institute for special needs children.* ***Study sample:*** *A non-probability sampling technique (purposive sampling) of (112) children with IDs and (112) caregivers are included in the study. all children are medically diagnosed with IDs.* ***Tools:*** *The questionnaire was adopted and developed by the researcher to achieve the objectives of the study, which consists of four parts: part (1) consist of children's Socio-Demographic data and children's clinical data, part (2) caregiver's Socio-demographic data, part (3) Brief Cope Inventory scale, and part (4) Satisfaction with Life Scale (SWLS). the validity of the study instrument achieved through a panel of experts. The data described statistically and analyzed through the use of descriptive and inferential statistical analysis procedures.* ***Results:*** *The results of the present study indicated that the overall assessment for caregivers' psychological adjustment was poor; the overall assessment of caregivers' life satisfaction was unsatisfied with their life and there is a highly significant relationship between psychological adjustment and life satisfaction among caregivers of children with intellectual disabilities.* ***Conclusions:*** *The study concluded that the male is the dominant gender for the children with intellectual disabilities, intellectual disabilities are most commonly occurs among the first child in the family, the mild disability is the most common level or degree of children with intellectual disabilities, females (mothers) are the dominant caregivers for the children with intellectual disabilities, the psychological adjustment among caregivers of children with intellectual disabilities is poor, the majority of the caregivers of children with intellectual disabilities are unsatisfied about their life due to their children's disability, and there is a significant and positive relationship between psychological adjustment and*

---

[1] *Psychiatric Mental Health Nursing, Faculty of Nursing, University of Kufa, Najaf, Iraq.*
[2] *Psychiatric, Department of Internal Medicine, Faculty of Medicine, University of Kufa, Najaf, Iraq. E-mail / arafat.aldujaili@uokufa.edu.iq*

life satisfaction among caregivers of children with intellectual disabilities. ***Recommendations:*** *The current study recommends encourage the faculty staff and postgraduate students to benefit from the results of the present study and another studies should be conducted about how to improve the psychological adjustment among caregivers of children with intellectual disabilities and another studies should be conducted about how to increase the caregivers' life satisfaction.*

*KEY WORDS**:** Psychological adjustment, Life satisfaction, Caregivers of children, Intellectual disabilities (IDs).*

INTRODUCTION:

IDs are life-long disabilities that occur during the developmental years and characterized by limitations in general intellectual functions and adaptive behaviors (McKenzie et al., 2016). The specific criteria differ across countries and historical periods. If an (IQ) test results are less than 70-75 is accepted as a significant restriction of intellectual function, in addition to deficits in two or more adaptive behaviors that affect everyday social and practical skills, it can fall under this label (Schuengel et al., 2017).

The prevalence of ID is 1% of the total population. The worldwide reported prevalence of ID is 16.41 per 1,000 people in low-income countries. 15.41 per 1,000 people in middle-income countries; and 9.21 per 1,000 people in high-income countries. The ratio of boys to girls for IDs is 2:1. In a family with a child with severe ID, the risk of recurrence for another child with ID is between 3% and 9% (Maulik et al., 2011).

IDs can happen isolated or in combination with birth defects or other neurological features such as epilepsy, sensory disability, autism spectrum disorders. the severity of IDs is highly variable and includes (mild, moderate, severe, and profound). IDs can be caused by exogenous factors such as alcohol abuse in mothers during pregnancy, infections, birth complications, and extreme malnutrition. However, genetics factors are known to play an important role in their etiology (Vissers et al., 2016).

The concept of psychological adjustment in parents of disabled children may be elaborated as adaptation and management of distressing emotions that are caused by the child's disability and showing emotional balance (Vermaes et al., 2005).

When the child is born with a handicap, this comes as a shock to this the family, affecting its whole structure. Knowing the handicap of the child turns the family's expectations for this child upside down. Sometimes the unwanted attitude of the parents is the result of the differences between the desire to obtain healthy children and the real child with a disability (Vargas-Muñoz et al., 2017).

Generally, it is known that the intellectual disabled child is vulnerable in intellectual and adaptive functioning; the results showed that more than 90% of children with IDs needed help to buy, prepare, do the housework, do the laundry, and manage the money. In these circumstances, the legal guardians are primarily parents who take care of their children in all daily activities. They are also responsible for expenses related to child disabilities, rehabilitation, education, and other special needs and feel depressed by the endless care of their children and isolated due to lack of free time and interpersonal relationships (Cho & Kahng, 2015).

Further, during the rearing of an intellectually disabled child, the parents of this child experienced adjustment problems because of being unable to balance among their family, professional and other responsibilities. At this period these parents are experiencing emotional states of denial, guilt, self-blaming, anger, and depression. Denial status can be explained by the parents' inability to admit a child's disability which leading to poor psychosocial adjustment and mental health problems. Later, starting school, moving from childhood to adulthood, and its accompanying transition in-service support from child to adult services for these children leads to a decrease in emotional health, a lack of energy, and a decrease in financial resources, which further deteriorates the psychological adjustment of their parents (Noor et al., 2017).

Generally, life satisfaction is defined as an individual's judgment of how satisfied they are with their current situation based on a comparison with the criteria that each individual sets for him or herself. In other word, life satisfaction can be defined as an individual's cognitive assessment on his or her general life (Cho & Kahng, 2015). Because life satisfaction is a cognitive factor in assessing people about their lives, it reflects past experiences, current reality, and future life prospects. It provides more than just how an individual feels a specific experience at the time; It integrates a general assessment of life as a whole. Many factors can determine this judgment, such as personality, income, education, level of knowledge, environment, etc. (De Oliveira & Hlebec, 2016).

Parents' feelings of guilt, sadness, and frustration towards their child's disability can increase tensions and conflicts in family life and lead to less life satisfaction (Chung & Cho, 2013). Also, being a caregiver for longer periods in life may decrease life satisfaction as the care recipient’s functioning is likely to decrease, while home caregiving is likely to continue. Caregivers who experience changes in their lives as a result of caregiving and those who have difficulty adapting their lives to their role as caregivers may be dissatisfied with their lives (Chang et al., 2013). In other words, the additional demands for the caring of children with IDs have a negative impact on the psychological adjustment and the life satisfaction of caregivers.

The nurses play an important role in teaching and helping family caregivers to provide care for care recipients (Schulz & Sherwood, 2008). Nurses should recognize and respect the caregivers' efforts, identify their needs, provide detailed guidance on their particular care (e.g. medication management, changes in dress, and similar tasks), and refer them to possible sources of ongoing assistance (Reinhard et al., 2008).

Significance of the study:

IDs are permanent disabilities characterized by limitations in adaptive behaviors and below-average general intellectual functions (IQ below 70), are very common among children around the world, and the rates of greater children survive are likely to increase through improved medical care. Besides, IDs are considered the most common serious developmental disabilities (Masulani-Mwale et al., 2018).

Data from the National Health Interview Survey (NHIS) 2009-2017 show that the prevalence of IDs in the United States increased significantly (0.93% to 1.17%) among children aged (3-17) (Zablotsky et al., 2019). Also, children with IDs aged less than 18 were reported to be mainly cared for by their parents, and the majority of them (91.1%) were found to be living with their parents (Cho & Kahng, 2015).

Besides, parents who have a child with a disability such as an ID or mental disorder face responsibility for caregiving throughout their lifetime. The period of active caregiving by parents who have a disabled daughter or son often extends over many decades (Kim et al., 2003).

The birth of a disabled child creates a huge impact on the parents, as shown by numerous studies, most of which focused on the psychological adjustment of parents. The significance of this issue lies in the adjustment difficulties which exist in parents having a disabled child (Vargas-Muñoz et al., 2017).

Also, caregivers of children with IDs are particularly at risk for greater distress and more susceptible to negative consequences such as depression, social isolation, and marital problems compared to parents of children with other disabilities. Therefore, It is very important to examine the overall evaluation of life among the caregivers of children with IDs as life satisfaction reflects every positive and negative life situation in which they live (Cho & Kahng, 2015).

Based on his knowledge of the studies covered by this subject and the size of the problem that can be caused by this disability with the lack of interest to this group and the caregivers this why we invited to design this study. Moreover, no other researchers studied the relationship between psychological adjustment and life satisfaction among caregivers of patients with IDs in Iraq which may influence providing care for intellectual disabilities children.

Therefore, the researcher highlights the family caregivers role to find themselves dealing with additional challenges to cope and accept the modification, and minimizing the impact of ID on caregivers by helping them to adjust their expectations to their children.

Objectives of the Study:

1. To assess the level of psychological adjustment among caregivers of children with intellectual disabilities.
2. To assess the level of life satisfaction among caregivers of children with intellectual disabilities.
3. To find out the relationship between psychological adjustment and life satisfaction among caregivers of children with intellectual disabilities.
4. To Find out the relationship between the psychological adjustment of caregivers with child characteristics such as gender, age, order of children in the family, live father, live mother, the number of children with intellectual disabilities in the family, degree of intellectual disabilities by diagnosis, other disabilities by diagnosis and using handicap devices; also, with caregivers characteristics such as degree of relative, age, occupation status, educational level, number of family members, marital status, monthly income, residency area and participation in trainings about intellectual disability.

MATERIALS AND METHODS:

Design of the Study:
A descriptive (correlation) quantitative design was utilized in order to achieve the objectives of present study. from the period of 15 th October 2019 to 9 th September 2020.

Setting of the Study:

The study was conducted at AL-Najaf city \ AL-Raja Institute and Dema Institute for special needs children.

Sample of the Study:

A non-probability sampling technique (purposive sampling) of (112) children with IDs and (112) caregivers are included in the study. all children are medically diagnosed with IDs.

Including Criteria:

1. All children are diagnosed by psychiatrists with IDs.
2. Both sexes (male and female).
3. All caregivers are from Al-Najaf city and Arabic Nationality.
4. The ages of all caregivers were 18 years old and more.
5. Caregivers of children who were diagnosed with IDs for at least six months.

Exclusion Criteria

1. The respondents that did not completely fill out the questionnaire.
2. Caregivers of children with ID under 18 years old.

Study Instrument:

An assessment tool was adopted and developed by the researcher to find out the relationship between psychological adjustment and life satisfaction among caregivers of children with IDs. The final copy consists of the following parts:

Part I: consists of (2) subparts, which include:

A. Socio-demographic characteristics of children with intellectual disabilities: which consists of (5) items, including gender, age, the order of the disabled child in the family, live father and live mother.

B. Clinical characteristic of children with intellectual disabilities: which consists of (6) items, Is there family history for children with IDs in the family, duration of IDs since diagnosis, age of the child at diagnosis, degree of IDs by diagnosis, other of child's disabilities by diagnosis, using handicap devices (headphones, phone speaker, sound poster devices, wheelchairs, walkers and crutches, vehicles equipped for the physically disabled).

Part II: Socio-demographic characteristics of caregivers consists of nine items, which included the degree of a relative, age, family members at home, marital status, residency area, monthly income, occupational status, educational level, and Participation in Training about ID.

Part III: Brief Cope Inventory
Brief cope is a briefer form of cope inventory developed by (Carver, 1989), used to measure the psychological adjustment among caregivers of children with IDs. This scale consisted of 28 items categorized into adaptive and maladaptive subscales, based on evidence that all these factors appear to be either adaptive or problematic (Carver, 1997). The adaptive coping subscale contains 16 items, such that higher scores indicate good psychological adjustment. The adaptive coping subscale includes positive reframing, active coping, planning, acceptance, using emotional Support, using instrumental support, humor, and religion (item no. 2, 5, 7, 10, 12, 14, 15, 17, 18, 20, 22, 23, 24, 25, 27, 28). The maladaptive coping subscale contains 12 items, such that higher scores indicate poor psychological adjustment. The maladaptive coping subscale includes behavioral disengagement, self-distraction, self-blame, denial, venting, and substance use (item no. 1, 3, 4, 6, 8, 9, 11, 13, 16, 19, 21, 26). Scoring for the 28 questions are a 4-point Likert scale as follows: 1 for Never; 2 for Very

less; 3 for Sometimes; 4 for A lot. But the scoring is reverberating for the negative direction questions by items (1, 3, 4, 6, 8, 9, 11, 13, 16, 19, 21, 26) { A lot, Sometimes, Very less, Never }.

Part IV: Satisfaction with Life Scale (SWLS) The Life Satisfaction Scale (SWLS) was first generated by authors (Diener et al., 1985) and published in an article in the Journal of Personality Assessment. The life satisfaction scale was developed to evaluate satisfaction with individuals' lives as a whole. the scale does not assess satisfaction with a particular life area, which includes health or finances, however, allows participants to integrate and weigh these areas in whatever way they choose. Completing it requires only a few minutes. The SWLS is a very simple and short questionnaire consisting of only 5 statements, that include (In ways my life is close to my ideal The conditions of my life are excellent, I am satisfied with my life, I am satisfied with my life, and If I could live my life over, I would change almost nothing). The Five-point Likert scale is scored as, 1 for Strongly disagree; 2 for disagree; 3 for Neither Agree nor Disagree; 4 for agree; 5 for Strongly agree.

Data Collection:

The data were collected through the utilization of the developed questionnaire and employing (self-report) technique with the subjects who were included in the present study, by using the Arabic version of the questionnaire, the caregivers were gathered in one place and the purpose of the study was explained to them; verbal consent to participate was obtained and the caregivers answered the questionnaire simultaneously for all subjects which included in this study.

Statistical analysis:

The data were analyzing through application of the descriptive and inferential data analysis methods, included:

1. Descriptive Data Analysis:

a. Tables (Frequencies, and Percentages).
b. Statistical figures (Pie Charts).
c. Statistical mean and standard deviation.
d. Mean of Score (MS).

2. Inferential Data Analysis:

a. chi-square
b. ANOVA

Limitations of the Study

This study faces some limitations during its process:

1. The study sample is distributed in a wide geographical area (center, suburbs, rural).
2. Some caregivers are refused participation in the study.
3. Lack of literature and previous studies relative to the relationship between psychological adjustment and life satisfaction among caregivers of children with IDs.
4. The time of implementation of this study is short due to the small sample size.
5. There is a lot of time needed for some caregivers because of their poor education to explain and clarify the questionnaire to them.
6. The sample of the present study did not include all the governments of Iraq.

STUDY RESULTS AND FINDINGS:

Table (4.1) Children's Socio-Demographic Characteristics.

No.	Child's Demographic Data	Rating And Intervals	Frequency	Percent
1.	s Gender	Male	76	67.9
		Female	36	32.1
		Total	112	100.0
2.	s Age/Year	7-10	48	42.9
		11 - 14	54	48.2

		15+	10	8.9
		Total	112	100.0
		Mean (std.dev.) = 11.03 (2.45)		
3.	Child's Order in Family	First	50	44.6
		Second	35	31.3
		Third	13	11.6
		Forth	8	7.1
		Fifth	4	3.6
		Sixth	2	1.8
		Total	112	100.0
4.	Father Alive	Yes	106	94.6
		No	6	5.4
		Total	112	100.0
5.	Mother Alive	Yes	109	97.3
		No	3	2.7
		Total	112	100.0

Table (4.1) This table Exhibits the Socio-Demographic characteristic of children with intellectual disabilities. The study findings show that (67.9%) of children are male, (48.2%) of them are within (11-14) years old and the age mean is (11.03), and (44.6%) of them are the first sequences in the family. In addition, the study findings indicate that (94.6%) of children with intellectual disabilities their fathers alive, and (97.3%) of them their mothers alive.

Table (4.2) Children's Clinical Characteristics.

No.	Child Clinical Characteristics	Rating and intervals	Frequency	Percent
1.	Is there family history for children with IDs in the family?	Yes	11	9.8
		No	101	90.2
		Total	112	100.0
2.	Duration of Disease Since Diagnosis / years	<= 3	20	17.9
		4 - 6	57	50.9
		7 - 9	30	26.8
		10+	5	4.5
		Total	112	100.0
		Mean (std.dev.) = 5.4 (2.12)		
3.	Age of Child At Diagnosis / years	<= 3	61	54.5
		4 - 6	36	32.1
		7- 9	13	11.6
		+10	2	1.8
		Total	112	100.0
		Mean (std.dev.) = 4.01 (2.06)		
4.	Degree of intellectual disabilities	Mild	71	63.4
		Moderate	28	25
		Severe	11	9.8
		Profound	2	1.8
		Total	120	100.0
5.	Other of child's disabilities	There is no disabilities	22	19.6
		Physical disabilities	20	17.9
		Hearing impairment	10	8.9
		Visual impairment	18	16.1
		Difficulty speaking	42	37.5
		Total	120	100.0
6.	Using handicap devices	Yes	102	91.1
		No	10	8.9
		Total	120	100.0

Table (4.2) refers to the Clinical Characteristics of children with intellectual disabilities. The study findings show that (90.2%) of children with intellectual disabilities are not having a family history of intellectual disabilities. (50.9%) of them, the duration of intellectual disabilities since diagnosis is (4-6) years old, and (54.5%) of them their ages at diagnosis is less than 3 years old. In addition, the study findings reveal that (63.4%) of them having mild intellectual disabilities, (37.5%) of them are having difficulty speaking, and (91.1%) of them are not using handicap devices.

Table (4.3) Distribution of the Caregivers According to their Socio-Demographic Characteristics.

No.	Caregiver Characteristic	Rating and intervals	Frequency	Percent
1.	Degree Of Relative	Father	17	15.2
		Mother	95	84.8
		Total	120	100.0
2.	Age Of Caregiver /Years	19 – 24	10	8.9
		25 - 31	14	12.5
		32 – 38	61	54.5
		39 – 45	22	19.6
		46 & Above	5	4.5
		Total	120	100.0
		Mean (std.dev.) = 35.0 (6.06)		
3.	Numbers of Family Members	1-3	5	4.5
		4 - 6	71	63.4
		7 - 10	26	23.2
		11+	10	8.9
		Total	120	100.0
4.	Marital Status	Married	108	96.4
		Widowed	4	3.6
		Total	112	100.0
5.	Residency Area(Housing)	Urban	107	95.5
		Rural	5	4.5
		Total	112	100.0
6.	Caregiver Occupation	Employed	36	32.1
		Free Work	22	19.6
		Unemployed	2	1.8
		Housewife	52	46.4
		Total	120	100.0
7.	Caregivers' Education	Unable to Read and Write	8	7.1
		Able to Read and Write	11	9.8
		Primary School	20	17.6
		Secondary School	50	44.6
		Institute	5	4.5
		Collage	17	15.2
		Master and Doctorate Degree	1	0.9
		Total	120	100.0
8.	Do you enough monthly income for family needs	Insufficient	34	30.4
		Barely Sufficient	46	41.1
		Sufficient	32	28.4
		Total	120	100.0
9.	Participation in Trainings about ID	Not Once	72	64.3
		Once	24	21.4
		Twice	10	8.9
		Three or More	6	5.4

Levels of psychological adjustment	Frequency	Percent	Mean	Assessment
Poor	72	64.3	1.97	Poor
Fair	28	25.0		
Good	12	10.7		
Total	112	100%		

		Total	112	100.0

Table (4.3) Exhibits the Socio-Demographic distribution of the study sample. The study findings show that (84.8%) of caregivers are female (mothers), (54.5%) of them are within the third age group (32-38) years old and the mean age of them is (35) years, (44.6%) of them are graduate at secondary school, and (41.1%) of them their monthly income is barely sufficient. In addition, the study findings show that (96.4%) of the participants are married, (46.4%) of them their occupation is housewife, (95.5%) of them are from the urban residential area, and (64.3%) of them are not a participation in any training about intellectual disabilities.

Table (4.4) Overall Distribution of the caregivers according to their levels of psychological adjustment.

N (112), good (mean 1-2), fair (mean 2.1-3.1), poor (mean 3.2-4.2), cutt off point (1).

Table (4.4) Displays the psychological adjustment among caregivers of children with intellectual disabilities. The study findings show that the majority of participants (64.3 %) have a low level of psychological adjustment and the minority of them (10.7 %) have a high level of psychological adjustment. The total average mean of caregivers' psychological adjustment is (1.97). Also, the overall assessment for caregivers' psychological adjustment was poor.

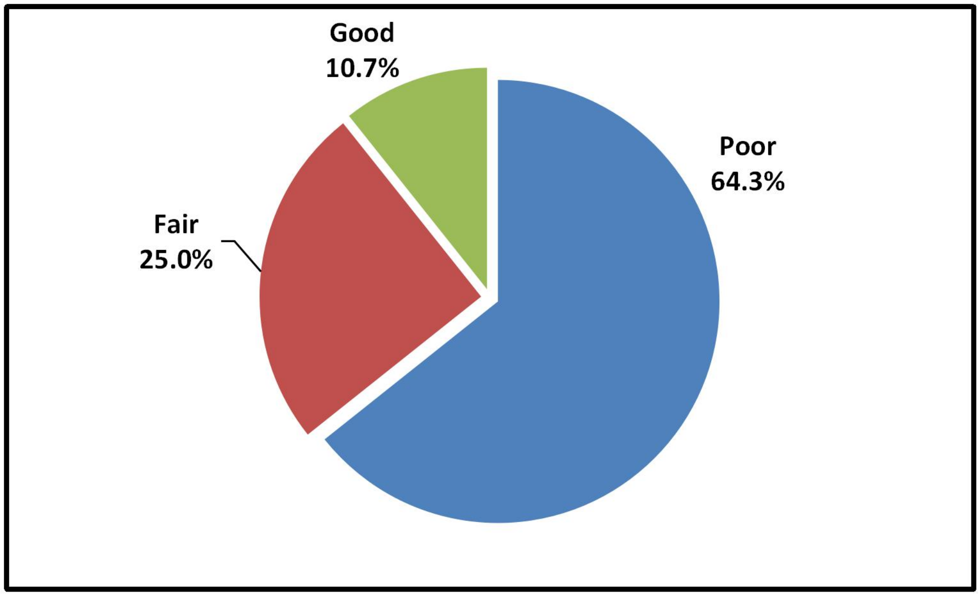

Figure (4.1) Overall Distribution of the caregivers according to their levels of psychological adjustment.

Table (4.5) Overall Distribution of the caregivers according to their levels of life satisfaction.

Life satisfaction (S.W.L) overall assessment	**Frequency**	**Percentage**	**Mean**	**Overall assessment**
Unsatisfied	**64**	**57.1**	**2.28**	**Unsatisfied**
Partially	**27**	**24.1**		
Satisfied	**21**	**18.8**		
Total	**112**	**100%**		

N (112), satisfied (mean 3.68-5.2), partially satisfied (mean 2.34-3.67), unsatisfied (mean 1-2.33), cutt off point (1.33).

Table (4.5) Exhibits life satisfaction among caregivers of children with IDs. The study findings reveal that the majority of participants (57.1%) are unsatisfied with their life and a minority of them (18.8%) are satisfied with their life. The total average mean was (2.28). Also, the overall assessment of caregivers' life satisfaction is unsatisfied.

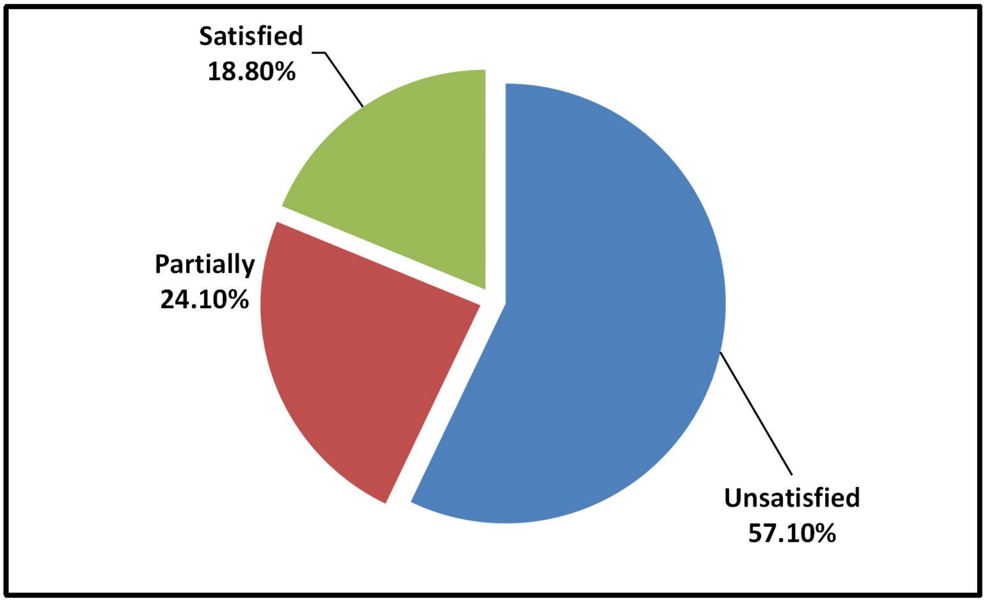

Figure (4.2) Overall Distribution of the caregivers according to their levels of life satisfaction.

Table (4.6) Association Between the Levels of psychological adjustment and life satisfaction among Caregivers.

Main studied domain	Levels	Psychological Adjustment			Sig.
		Poor	Fair	Good	
Overall life satisfaction	Unsatisfied	62	2	0	Chi-sequare value (86.89) d.f. (4) p-value (0.001) HS
	Partially satisfied	5	19	3	
	Satisfied	5	7	9	

Degree of freedom (D f) , A probability value (P-value) ,Significant(S) ,Non- significant(NS) , High significant (HS)

Table (4.6) Shows the association between the levels of psychological adjustment and life satisfaction among caregivers of children with IDs. The study findings indicate that there is a highly significant relationship between caregivers' psychological adjustment and their life satisfaction (p= 0.001) at (p< 0.05) when analyzed by the chi-square test. The study result indicates that there is a direct correlation relationship between psychological adjustment and life satisfaction (i.e. When life satisfaction increases psychological adjustment increase also vice versa).

Table (4.7) Analysis of variance of the caregivers' life satisfaction according to their psychological adjustment.

Psychological adjustment	N	Mean	Std. Deviation	F	p-value
Poor	72	1.750 (life unsatisfied)	.75414	57.46	0.001 HS
Fair	28	3.043 (life partially satisfied)	.72696		
Good	12	3.717 (life satisfied)	.56219		
Total	112	2.28	1.03720		

Table (4.7) ANOVA analysis is conducted to determine the difference in the caregivers' life satisfaction according to their levels of psychological adjustment. The study results indicate that there is a highly significant difference in the caregivers' life satisfaction according to their levels of psychological adjustment. With respect to the statistical mean, the study results indicate that the poor psychological adjustment is associated with life dissatisfaction and vice versa.

Table (4.8) Relationship between the Caregiver' psychological adjustment and Socio-Demographic data of their children.

No.	Child's Demographic Data	Chi-Square Value	D.F	P-value
1.	Gender	7.350	2	0.025 S
2.	Child Age/Year	3.506	4	0.477 NS
3.	Child Order in Family	2.976	10	0.982 NS
4.	Father Alive	2.465	2	0.292 NS
5.	Mother Alive	0.419	2	0.811 NS

Degree of freedom (D.f), A probability value (P-value), Significant (S), Non- significant (NS),

High significant (HS).

Table (4.8) Exhibits the relationship between the caregivers' psychological adjustment and the Socio-Demographic data of their children. The study results show that there is a significant relationship between psychological adjustment level among caregivers of IDs children concerning the child’s gender (p= 0.025). while there is no significant relationship between psychological adjustment level among caregivers of IDs children with the remaining socio-demographic data of children.

Table (4.9) Relationship between the Caregiver’ psychological adjustment and Clinical data of their children.

No.	Child Clinical Characteristics	Chi-Square Value	D.F	P-value
1.	Is There IDs Children In Family?	1.938	2	0.380 NS

2.	Duration of Disease Since Diagnosis	6.699	6	0.360 NS
3.	Age of Child at Diagnosis	6.234	6	0.397 NS
4.	Degree of intellectual disabilities	15.016	6	0.020 S
5.	Other of child’s disabilities	10.034	8	0.263 NS
6.	Using handicap devices	3.294	2	0.193 NS

Degree of freedom (D.f), A probability value (P-value), Significant(S), Non- significant(NS), High significant (HS).

Table (4.9) Displays the relationship between the Caregivers’ psychological adjustment and Clinical data of their children. The study results reveal that there is a significant relationship between the psychological adjustment level of caregivers of IDs children and child's clinical data (medical diagnosis of children p-value 0.041, the degree of intellectual disabilities p-value 0.02). while there is no significant relationship between psychological adjustment level among caregivers of IDs children with the remaining clinical data of children.

Table (4-10) Relationship between the Caregiver’ psychological adjustment and their Demographic data.

No.	Caregiver Demographic Data	Chi-Square Value	D.F	P-value
1.	Degree Of Relative	10.950	2	0.004 HS
2.	Age (Year)	4.057	8	0.852 NS
3.	Family members	3.232	6	.779 NS
4.	Marital Status	.519	2	.772 NS
5.	Residency Area	3.605	2	.165 N.S
6.	Caregiver Occupation	9.684	6	.139 NS
7.	Caregiver's Level Of Education	27.545	12	.006 HS
8.	Monthly Income	16.660	4	.002 HS
9.	Participation in Trainings about ASD	5.731	6	.454 NS

Degree of freedom (D.f), A probability value (P-value), Significant (S), Non- significant (NS), High significant (HS).

Table (4.10) Shows the Relationship between the Caregivers' psychological adjustment and their socio-demographic data. The study results indicate that there is a high-significant relationship between the psychological adjustment level of caregivers and their socio-demographic characteristics (degree of relative p-value 0.004, Level of Education p-value 0.006, Monthly Income p-value 0.002). while there is no significant relationship among psychological adjustment level of caregivers and the remaining socio-demographic data.

DISCUSSION:

IDs are life-long disabilities that occur during the developmental years and characterized by limitations in general intellectual functions and adaptive behaviors (McKenzie et al., 2016). The prevalence of ID is 1% of the total population. The worldwide reported prevalence of ID is 16.41 per 1,000 people in low-income countries. 15.41 per 1,000 people in middle-income countries; and 9.21 per 1,000 people in high-income countries (Maulik et al., 2011).

The birth of a disabled child creates a huge impact on the parents, as shown by numerous studies, most of which focused on the psychological adjustment of parents. The significance of this issue lies in the adjustment difficulties which exist in parents having a disabled child (Vargas-Muñoz et al., 2017). Moreover, an intellectually disabled child in a family is usually a serious stress factor for parents. It often requires reorientation and re-evaluation of family goals, responsibilities, and relationships

(Azeem et al., 2013). Multifaceted factors like social isolation, financial constraints, poor marital relationships, behavioral, health, and developmental problems of the child and above all limited family and social support have made parents vulnerable to stress and psychological maladjustment. The present study aimed to assess the levels of psychological adjustment and life satisfaction among caregivers of children with IDs, and to find out the relationship between psychological adjustment and life satisfaction among caregivers of children with IDs.

Concerning the socio-demographic characteristic of children with IDs. The results of the current study show that two third of children with IDs are male. The results of this study agree with the study of Gopalan et al., (2014), who reported that the majority of children with IDs (61.3%) were boys and (38.7%) were girls. Also, these findings consistent with Singh et al., (2008) whose findings reveal that the majority of the children (66.2%) were males whereas the female was only (33.8%).

Concerning the socio-demographic characteristic of caregivers of children with IDs. The results of the present study indicate that more than three quarters of the caregivers are female (mothers); this may be due to mothers were the primary caregivers in all families that she actually goes to the doctor with his children for follow up and checkup more than the father. As children with IDs are associated with many medical problems that need extra care, follow-up, and even hospitalizations that need from parents spent more time with their children. These findings were consistent with Cramm and Nieboer (2011) who found that the majority (79.7%) of the caregivers of children with IDs were females (mothers). Also, this result comes along with Masulani-Mwale et al., (2018) whose results show that the majority (77.67%) of the caregivers of IDs children were mothers.

Regarding the caregivers' age, the results of the current study reveal that more than half of the caregivers' ages ranging between 32-38 years with a Mean (35) years old. This result was similar to Barakat and Mohamed (2019) whose findings showed that (54%) of the studied caregivers' age ranging between (32-38) years old with a Mean (35.8) years old. Also, this finding comes along with Mbugua et al., (2011) who found that the result (54.6%) was less than 40 years old, is the major age category for caregivers of IDs children.

In relation to the educational level of caregivers, the results show that the majority of the caregivers are a graduate of secondary school. This result comes along with Crnković et al., (2018) who pointed out that (55%) of caregivers with IDs children were at secondary school graduates. In addition, Masulani-Mwale et al., (2018) whose findings revealed that the majority of parents of children with IDs had completed secondary education.

Concerning the occupation status of the caregivers, the results of the current study reveal that nearly to half of the study sample their occupation are housewives. This result comes along with the results of the study conducted by Singh et al., (2008) who found that (43.1%) of family caregivers were housewives. Also, this result agrees with Norizan and Shamsuddin (2010), who found that most parents of children with IDs were housewives.

Regarding the caregivers' monthly income, the present study illustrated that the majority of the caregivers their monthly income is barely sufficient. This result agrees with Singh et al., (2008) who revealed that the majority of the caregivers (43.1%) their monthly income were barely sufficient. Also, these results consistent and supported by Barakat and Mohamed (2019) who illustrated that the majority (48.0%) of the caregivers their monthly income barely sufficient. On the same side, children with disabilities and their families are significantly more likely to live in poverty than typically developing peer and their families. This is because of the increased financial burden experienced by the families of children with developmental disabilities due to very high care costs such as rehabilitation service, specialized schooling, medical care, and transportation (Cho & Kahng, 2015).

Concerning the numbers of family member, the present study reveals that nearly to two thirds of the family caregivers have two children. This finding agrees with Oh and Lee (2009) who revealed that the majority of family households (64.9%) were a composition of four members, including parents and two children. Also, this result was similar to Barakat and Mohamed (2019) who showed that the majority (64%) of families their numbers were four members.

Concerning the level of psychological adjustment among caregivers of children with IDs, the results of the present study indicate that two-thirds of the studied caregivers had a poor level of psychological adjustment. This result consistent with Vargas-Muñoz et al., (2017) who revealed that the families having children with disabilities have higher levels of maladjustment. This is because the birth of a child with a disability creates a huge impact on the family, as revealed by numerous studies, the majority of which have focused on the psychological adaptation of the parents. Also, the finding of the present study comes along with Noor et al., (2017) who stated being parents of children with IDs, their social and psychological adjustment are also getting disturbance. On the same side, Jiménez et al., (2017) revealed that caregivers have worse physical and psychological health than non-caregivers. Therefore, caregivers have poorer physical health “somatization”, less psychological adjustment than people in the overall Spanish population.

Further, during the rearing of an intellectually disabled child, the parents of this child experienced adjustment problems because of being unable to balance among their family, professional and other responsibilities. At this period these parents are experiencing emotional states such as denial, self-blaming, guilt, anger, and depression. Denial status can be explained by the parents' inability to admit a child's disability which leading to poor psychosocial adjustment and mental health problems. Later, starting school, moving from childhood to adulthood, and its accompanying transition in-service support from child to adult services for these children leads to a decrease in emotional health, a lack of energy, and a decrease in financial resources, which further deteriorates the psychological adjustment of their parents (Noor et al., 2017).

Concerning the level of life satisfaction among caregivers of children with IDs, the result of the present study reveals that more than half of the studied caregivers had a low level of life satisfaction (unsatisfied with their life). These results have the same agreement with the study of Cho and Kahng (2015) who reported that the frequent caregivers had substantially lower levels of LS compared to the less frequent caregivers and the non-caregivers. Also, Burton-Smith et al., (2009) revealed that the level of life satisfaction among caregivers of children with various disabilities (75% having IDs) is significantly lower than those of the general population.

Besides, Olsson et al., (2008) examined the well-being of the caregivers; particularly how satisfied the parents of IDs children with their life and health, and the finding was the parents of children with IDs had less well-being than parents of children without disabilities. On the same side, This finding consistent with Gebeyehu et al., (2019) who stated that the physical, psychological, social, economic, and emotional requirements of children with IDs who are not adequately functioning may influence the overall life satisfaction of their caregivers and his findings showed that caregivers had substantially lower satisfaction with their life. This may be because the family caregivers are facing a lot of difficulties and challenges in raising a child with ID with negligible assistance from everyone else and this in turn can lead them to be dissatisfaction with their lives.

The results of the present study show that there is a highly significant and direct relationship between psychological adjustment and life satisfaction among caregivers of children with IDs. This finding was consistent with Sanjuán et al., (2011) who revealed that life satisfaction was inversely and significantly related to anxious and depressive symptoms and directly and significantly associated with positive adjustment. In turn, the positive adjustment was inversely and significantly associated with depressive and anxiety symptoms. Therefore, caregivers who were more satisfied with their lives and those who used more positive adjustment strategies reported fewer anxious and depressive symptoms. Also, the result above also reflected by the study of Zhou and Lin (2016) who found that adaptability was positively related to life satisfaction.

Further, this finding comes along with Jiménez et al., (2017) who showed that psychological adjustment is related to the lower burden, higher family satisfaction, and greater perception of social support among family caregivers. Also, Pavot and Diener (2008) stated that the adjustment process has a broad and generally stabilizing influence on life satisfaction. Stressful or traumatic experiences, such as acting as a caregiver for a person with a chronic disability can produce long-term negative impacts on life satisfaction.

The analysis of the current study reveals that there is a significant relationship between the psychological adjustment level among caregivers of IDs children and the child’s gender. This result consistent with Vermaes et al., (2005) who indicated that there is a significant relationship among the child’s gender and the parents' psychological adjustment level. Also, Vargas-Muñoz et al., (2017) revealed that the parents of the daughters with disabilities reported higher scores on the maladjustment scale.

The result of the present study shows that there is a significant relationship between the psychological adjustment of caregivers and the severity of IDs children. This result comes along with Vermaes et al., (2005) who indicated that there is a significant association between a child’s cognitive capacities, disability parameters, and Parents' psychological adjustment. on the same side, Gage-Bouchard et al., (2013) stated that the severity of illness is influencing parental adjustment processes (i.e., methods of coping, family functioning, and cognitive processing), which in turn influence parental adjustment.

The results of the current study indicates that there is a highly significant relationship between the gender of the caregivers and their psychological adjustment level. The results revealed that there are highly substantial differences between female caregivers suffering a greater level of poor psychological adjustment as compared with male caregivers. This finding is come along with what Navarta-Sánchez et al., (2016) reported: that the gender of caregivers significantly predicts caregivers' psychosocial adjustment. Also, this result was reflected by the study of Bachanas et al., (2001) who revealed that men are more likely to have better adjustment compared to women.

The results of the current study reveals that there is a highly significant relationship between the educational level of caregivers and their psychological adjustment levels. These results were consistent and supported by the study of Vargas-Muñoz et al., (2017) who revealed that there was a highly statistically significant difference between psychological maladjustment among caregivers and their educational level. caregivers who have lower education levels had higher maladjustment scores as compared to those with higher-level studies. parents with a lower education level scored higher on the maladjustment scale, leading us to believe that increased education offers families more resources to face this situation.

In relation to caregivers' monthly income, the results reveal that there is a highly significant relationship between psychological adjustment levels of caregivers with their monthly income. The finding of this study consistent with Vermaes et al., (2005) who found that the monthly family income was significantly associated with parental psychological adjustment. Also, The result above agrees with Bachanas et al., (2001) who reported that the family resources were significantly correlated with caregivers' psychological adjustment. This finding reflects the impact of poverty on caregivers' adjustment.

CONCLUSION:

The result of the present study concluded that male is the dominant gender for the children with intellectual disabilities, intellectual disabilities are most commonly occurs among the first child in the family, the mild disability is the most common level or degree of children with intellectual disabilities, the majority of children with intellectual disabilities not using handicap devices. females (mothers) are the dominant caregivers for the children with intellectual disabilities, the secondary graduate is the most common educational level among caregivers of children with intellectual disabilities, the majority of caregivers of children with intellectual disabilities their monthly income is barely sufficient, the psychological adjustment among children's caregivers is poor, the majority of the caregivers are unsatisfied about their life due to their children's disability, and there is a highly significant and positive relationship between psychological adjustment and life satisfaction among caregivers of children with intellectual disabilities.

RECOMMENDATIONS:

Based on the study results and conclusion, the ministry of higher education and scientific research should encourage the faculty staff and postgraduate students to benefit from the results of the present study, other studies should be conducted about how to improve the psychological adjustment among caregivers of children with intellectual disabilities, and other studies be conducted about how to increase life satisfaction among caregivers of children with intellectual disabilities. The ministry of health must encourage their personnel to use the results of the present study in making plans to increase the caregivers' psychological adjustment through mass media or other ways and should be making plans about how to improve the health conditions of intellectually disabled children. The ministry of labor and social affairs must establishment of rehabilitation centers for the intellectually disabled children in each province, there is a need for legislation for financial support not only for the intellectually disabled children but also for their families and strengthening private/ public partnership in intellectual disabilities management.

REFERENCES:

1. Azeem, M. W., Dogar, I. A., Shah, S., Cheema, M. A., Asmat, A., Akbar, M., Kousar, S., & Haider, I. I. (2013). Anxiety and Depression among Parents of Children with Intellectual Disability in Pakistan. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, *22*(4), 290–295.
2. Bachanas, P. J., Kullgren, K. A., Schwartz, K. S., McDaniel, J. S., Smith, J., & Nesheim, S. (2001). Psychological Adjustment in Caregivers of School-Age Children Infected with HIV: Stress, Coping, and Family Factors. *Journal of Pediatric Psychology, 26*(6), 331–342.
3. Barakat, M. M., & Mohamed, R. E. (2019). Relationship between Parent Stress, Psychological Well-Being and Coping Strategies among Parents with Down Syndrome Children. *IOSR Journal of Nursing and Health Science (IOSR-JNHS), 8*(6), PP. 57–74.
4. Burton-Smith, R., McVilly, K. R., Yazbeck, M., Parmenter, T. R., & Tsutsui, T. (2009). Quality of Life of Australian Family Carers: Implications for Research, Policy, and Practice. *Journal of Policy and Practice in Intellectual Disabilities, 6*(3), 189–198.

5. Carver C. S. (1997). You Want to Measure Coping but Your Protocol's too Long: Consider the Brief COPE. *International Journal of Behavioral Medicine, 4*(1), 92–100.
6. Chang, A. K., Park, J., & Sok, S. R. (2013). Relationships among Self-Efficacy, Depression, Life Satisfaction, and Adaptation among Older Korean Adults Residing in for-Profit Professional Nursing Facilities. *The Journal of Nursing Research : JNR, 21*(3), 162–169.
7. Cho, S., & Kahng, S. K. (2015). Predictors of Life Satisfaction among Caregivers of Children with Developmental Disabilities in South Korea. *Asian Social Science, 11*(2), 154–166.
8. Chung, Y. S., & Cho, Y. S. (2013). Parent Counseling for Disabled Children. *Journal of the Rights of Children with Disability, 4*(2), 47-61.
9. Cramm, J. M., & Nieboer, A. P. (2011). Psychological Well-Being of Caregivers of Children with Intellectual Disabilities: Using Parental Stress as a Mediating Factor. *Journal of Intellectual Disabilities : JOID, 15*(2), 101–113.
10. Crnković, I., Buzov, P., Režan, R., & Racz, A. (2018). Evaluation of the Quality of Life for Parents and Caregivers of Adults with Intellectual Disabilities in the Local Community. *Annals of Physiotherapy Clinics, 1* (2), 1007.
11. De Oliveira, D. C., & Hlebec, V. (2016) Predictors of Satisfaction with Life in Family Carers: Evidence From the Third European Quality of Life Survey. *Teorija in Praksa, 53* (2). pp. 503–523.
12. Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment, 49*(1), 71–75.
13. Gage-Bouchard, E. A., Devine, K. A., & Heckler, C. E. (2013). The Relationship between Socio-Demographic Characteristics, Family Environment, and Caregiver Coping in Families of Children with Cancer. *Journal of Clinical Psychology in Medical Settings, 20*(4), 478–487.
14. Gebeyehu, F., Sahile, A., & Ayalew, M. (2019). Burden, Social Support, and Life Satisfaction Among Caregivers of Children With Intellectual Disability: The Case of Felege Abay and Shembt Primary Schools, Bahir Dar, Ethiopia. *International Quarterly of Community Health Education, 39*(3), 147–153.
15. Gopalan, R. T., Sharma, R., & Unnikrishnan, M. P. (2014). Socio-Demographic and Clinical Features of Children with Intellectual Disability and their Parents-an Indian Study. *International Neuropsychiatric Disease Journal, 2*(6), 289–302.
16. Jiménez, E., Limiñana-Gras, R., & Ato García, M. (2017). Psychological Adjustment of Elderly Caregivers of People with Dementia. *Journal of Gerontology & Geriatric Research, 6*(4), 442.
17. Kim, H. W., Greenberg, J. S., Seltzer, M. M., & Krauss, M. W. (2003). The Role of Coping in Maintaining the Psychological Well-Being of Mothers of Adults with Intellectual Disability and Mental Illness. *Journal of Intellectual Disability Research : JIDR, 47*(Pt 4-5), 313–327.
18. Masulani-Mwale, C., Kauye, F., Gladstone, M., & Mathanga, D. (2018). Prevalence of Psychological Distress among Parents of Children with Intellectual Disabilities in Malawi. *BMC Psychiatry, 18*(1), 146.
19. Maulik, P. K., Mascarenhas, M. N., Mathers, C. D., Dua, T., & Saxena, S. (2011). Prevalence of Intellectual Disability: A Meta-Analysis of Population-Based Studies. *Research in Developmental Disabilities, 32*(2), 419–436.
20. Mbugua, M. N., Kuria, M. W., & Ndetei, D. M. (2011). The Prevalence of Depression among Family Caregivers of Children with Intellectual Disability in a Rural Setting in Kenya. *International Journal of Family Medicine, 2011*, 534513.
21. McKenzie, K., Milton, M., Smith, G., & Ouellette-Kuntz, H. (2016). Systematic Review of the Prevalence and Incidence of Intellectual Disabilities: Current Trends and Issues. *Current Developmental Disorders Reports, 3*(2), 104–115.
22. Navarta-Sánchez, M. V., Senosiain García, J. M., Riverol, M., Ursúa Sesma, M. E., Díaz de Cerio Ayesa, S., Anaut Bravo, S., Caparrós Civera, N., & Portillo, M. C. (2016). Factors Influencing Psychosocial Adjustment and Quality of Life in Parkinson Patients and Informal Caregivers. *Quality of Life Research : An International Journal of Quality of Life Aspects of Treatment, Care and Rehabilitation, 25*(8), 1959–1968.
23. Noor, R., Gul, S., Saleem, T., & Shahzad, N. (2017). Relationship Of Stress, Anxiety and Psychological Adjustment Among Parents of Intellectually Disabled and Cerebral Palsy Children. *International Journal of Rehabilitation Sciences (IJRS), 4*(2), 32–35.
24. Norizan, A., & Shamsuddin, K. (2010). Predictors of Parenting Stress among Malaysian Mothers of Children with Down Syndrome. *Journal of Intellectual Disability Research : JIDR, 54*(11), 992–1003.
25. Oh, H., & Lee, E. K. O. (2009). Caregiver Burden and Social Support among Mothers Raising Children with Developmental Disabilities in South Korea. *International Journal of Disability, Development and Education, 56*(2), 149-167.
26. Olsson, M. B., Larsman, P., & Hwang, P. C. (2008). Relationships among Risk, Sense of Coherence, and Well-Being in Parents of Children with and without Intellectual Disabilities. *Journal of Policy and Practice in Intellectual Disabilities, 5*(4), 227–236.

27. Pavot, W., & Diener, E. (2008). The satisfaction with life scale and the emerging construct of life satisfaction. *The journal of positive psychology, 3*(2), 137-152.
28. Reinhard, S. C., Given, B., Petlick, N. H., & Bemis, A. (2008). Supporting Family Caregivers in Providing Care. In R. G. Hughes (Ed.), Patient Safety and Quality: An Evidence-Based Handbook for Nurses. Agency for Healthcare Research and Quality (US).
29. Sanjuán, P., Ruiz, Á., & Pérez, A. (2011). Life Satisfaction and Positive Adjustment as Predictors of Emotional Distress in Men with Coronary Heart Disease. *Journal of Happiness Studies, 12*(6), 1035-1047.
30. Schuengel, C., Kef, S., Hodes, M. W., & Meppelder, M. (2017). Parents with Intellectual Disability. *Current Opinion in Psychology, 15*, 50–54.
31. Schulz, R., & Sherwood, P. R. (2008). Physical and Mental Health Effects of Family Caregiving. *The American Journal of Nursing, 108*(9 Suppl), 23–27.
32. Singh, T. K., Indla, V., & Indla, R. R. (2008). Impact of Disability of Mentally Retarded Persons on their Parents. *Indian Journal of Psychological Medicine, 30*(2), 98-104.
33. Vargas-Muñoz, M. E., López-Liria, R., Rocamora-Pérez, P., Aguilar-Parra, J. M., Díaz-López, M. P., & Padilla-Góngora, D. (2017). Maladjustment in Families with Disabled Children. *Procedia-Social and Behavioral Sciences, 237*, 863-868.
34. Vermaes, I. P., Janssens, J. M., Bosman, A. M., & Gerris, J. R. (2005). Parents' Psychological Adjustment in Families of Children with Spina Bifida: a meta-analysis. *BMC Pediatrics, 5*, 32.
35. Vissers, L. E., Gilissen, C., & Veltman, J. A. (2016). Genetic Studies in Intellectual Disability and Related Disorders. *Nature Reviews Genetics, 17*(1), 9–18.
36. Zablotsky, B., Black, L. I., Maenner, M. J., Schieve, L. A., Danielson, M. L., Bitsko, R. H., Blumberg, S. J., Kogan, M. D., & Boyle, C. A. (2019). Prevalence and Trends of Developmental Disabilities among Children in the United States: 2009-2017. *Pediatrics, 144*(4), e20190811.
37. Zhou, M., & Lin, W. (2016). Adaptability and Life Satisfaction: The Moderating Role of Social Support. *Frontiers in Psychology, 7*, 1134.