Self-Esteem Of Caregivers Of Child With Developmental Dysplasia Of The Hip

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Abstract

Background: self-esteem could have a negative impact on caregivers and it is important for caregivers to take care of their own mental and physical health to provide the best care for their children.

Aims of the Study: the present study aims to assess the level of self-esteem among caregivers of children with DDH and to find out the relationships between self-esteem among caregivers of child with DDH and different socio-demographic characteristics.

Methods: A descriptive cross-sectional research design was used in this study which was conducted in Najaf city hospitals. A non-probability, convenience, technique was used to collect the data. The study subjects included 50 caregivers who have been selected from Najaf Province. The questionnaire is adapted and modified by the researcher to achieve the goals of the study.

Results: The results of the study revealed that caregivers of children with DDH have low levels of self-esteem. There is a significant relationship ($P<0.05$) between self-esteem and the socio-demographic characteristics marital status.

Keywords: caregiver, children, Developmental dysplasia of the hip (DDH), self-esteem.

INTRODUCTION

Self-esteem is a term used to express a person's general feeling of value or self-worth. It may also be defined as how people view themselves, how they feel they contribute to the world, and how important they believe they are to others (1). Self-esteem is influencing factors of mental health problems; the occurrence of life events decrease the level of self-esteem. It may work as a mediator between life events and mental health status It is reported that family function and life events correlate with each other. Self-esteem is an important psychological resource that contains values and abilities; it is at the core of

individual mental health which influences the psychological health state of the individual (2). The formation of self-esteem is a long process that is linked to the development of self-image and self-conscience. Because self-esteem is usually related with psychological conditions, it appears to be highly and adversely associated with both state depression and state anxiety (3). James (1890) established the first significant definition of self-esteem as the relationship between success and aspirations in the primary areas of life. James focused on the individual factors that influence self-esteem, while subsequent symbolic interactionism techniques highlighted how society affects self-esteem (4). Developmental dysplasia of the hip (DDH) is a term that describes the abnormal form of the newborn hip's acetabula, which can cause early osteoarthritis, increased wear, and severe functional gait impairment if a hip dislocation goes unnoticed (5). DDH refers to a variety of situations that have an impact on hip development and frequently affects infants and young children. It involves aberrant acetabular and/or proximal femoral growth and can vary from mild capsular laxity to frank dislocation (6).

Caregivers play a critical role since they are the primary source of information regarding their child's health status (7). The caregivers of handicapped children had impacts in all areas of quality of life and were at the risk for sadness, rage, and high levels of stress (8)(9). However, in reality, families that care for a family member with a handicap endure a decline in self-esteem as a result of the difficulties they face. Low self-esteem sets up a vicious cycle whereby a person is unwilling to seek for assistance and reduces their social circle, both of which increase the burden of care. Contrarily, a person with high self-esteem is less stressed because they have a greater ability to defend themselves from psychological difficulties and are able to react to conditions in a more positive way (10). Self-esteem has been recognized as one of the

mediators and moderators that might affect the health and quality of life of caregivers of disabled children(11). Therefore, it is very important to find ways to help the families improve self-esteem.

Methods and Materials

The Study Design:
A quantitative descriptive cross-sectional design was used in the current study to assess the level of self-esteem among caregivers of children with DDH and to find out the relationships between self-esteem among caregivers of child with DDH and different socio demographic characteristics.

Ethical Considerations:
Prior to conducting the study, the researcher adhered to the National Research Ethics Committee's standards and obtained an approval from the relevant government entity to ensure ethical considerations. After describing the goal of the study to each participant, the researcher assured to keep the caregivers' information private and only used for this study. In addition, to obtain the informed consent, the researcher told each participant that this was a voluntary role and that they might leave at any time.

Sample and sampling technique:
A non-probability sampling technique, convenience sampling, was used to choose a sample of fifty caregivers of children with DDH who were selected from, Al-Sadder Medical City, Al- Najaf Al-Ashraf Teaching Hospital, Al-Hakeem General Hospital, and Al-Furat Al-Awsat Teaching Hospital in Najaf Province.

Inclusion Criteria :
1. The ages of all caregivers above 18 years.
2. Both sex (male and female).
3. caregivers with no history of mental health problems. This problem is recognized with a particular question in the Socio-demographic section. All

caregivers stated that they had no history of mental health problems.

Criteria for Excluding from the Sample:

1. Caregivers who have been included in the pilot study sample,
2. Caregivers of children with DDH under 18 years old,
3. Respondents who did not completely answer the questionnaire

Study Instruments:

In addition to an assessment, the researcher constructed a self-administrative questionnaire, the final research instrument is divided into two parts:

Part I: Socio-Demographic Characteristics :
   Caregiver characteristics

This part consists of the Socio-demographic characteristics sheet consisting of (13) items, including who the caregiver are, their gender, age, mothers' age at child's birth, number of children, marital status, level of education, Primary knowledge about DDH, job, monthly income, residency area, family history of DDH, and if there is any psychiatric disorders.

   Child Characteristics

This included a socio-demographic characteristics sheet of (5) items: gender, age, birth order of the child in the family, types of delivery, type of treatment

Part II: The Rosenberg Self-Esteem Scale (RSES):

This is the most widely used measure of global self-esteem for research purposes but it is not a diagnostic aid for any psychological issues of states. It is a 10-item questionnaire; five of them have positively worded statements and the other five have negatively worded ones, Four response categories are used (strongly disagree, disagree, agree, strongly agree)

Data Collection

Participants were caregivers of children with a diagnosis of DDH, The researcher visited every caregiver separately, and after getting a verbal consent from the caregiver to participate, he demonstrates the contents of the questionnaire to them, and then to all individuals in the current study. The data were collected by using the designed questionnaire and the self-reported technique in the Arabic version of the questionnaire for the subjects included in the study.

Statistical Analysis

After the data was prepared for statistical analysis, the descriptive and inferential statistics was applied to the data analysis by using the Statically Package of the Social Sciences (SPSS), version (IBM 21) as follows:

Descriptive statistics.

The study used frequency and percentage tables and mean and standard deviation.

Inferential statistics

Cronbach's alpha, Analysis of Variance (ANOVA), is conducted for determining the difference in the study variables such the relationship between self-esteem overall scores and socio-demographic data.

The Results

Table (1) below shows the socio-demographic data of the caregivers in the study within mother caregiver (86%), female caregivers (90%), caregivers between the ages 18-27 and 28-37 with percentage (42%) , mother's age at child birth was the ages <= 27 (58%), those with number of children less than 3 (66%), those who are married (96%), those with primary level of education (37%); those who were not trained for DDH (96%) ; those who are housewives (66%); those with barely sufficient monthly income (56%); those who live in urban areas (62%); those with no family history of DDH(62%); those with no psychiatric disorder (100%). Child Characteristic has the highest percentage of: female gender (84%), while age of 2 years with percentage (34%), order of the child's birth being the first (32%) ; those with caesarean section of delivery (64%) and those with surgical treatment (58%) .

Table (1) A Statistical Summary of the Socio-Demographic Data related to the Study Sample

Socio -demographic data	Ranking and Interval	Freq.	%
Who are caregiver	Father	5	10.0
	Mother	43	86.0
	Sister	2	4.0
Gender	Male	5	10.0
	Female	45	90.0
Age	<= 27	21	42.0
	28 – 37	21	42.0
	38+	8	16.0
	Mean	30.26	
	SD.	6.369	
Mothers Age at Child's Birth	<= 27	29	58.0
	28 – 35	14	28.0
	36+	7	14.0
	Mean	28.6	
	SD.	5.53	
Number of children	<= 3	33	66.0
	4 – 6	16	32.0
	7+	1	2.0
Marital status	Married	48	96.0
	Divorced	2	4.0
Level of Education	Literate	11	22.0
	Primary	19	38.0
	Secondary S.	10	20.0
	College /High Education	10	20.0
Primary knowledge about DDH	Not Once	48	96.0
	The once	2	4.0
Working	Employed	9	18.0
	Free Work	6	12.0
	Unemployed	33	66.0
	Student	2	4.0
Monthly Income	Sufficient	14	28.0
	Barely Sufficient	28	56.0
	Insufficient	8	16.0
Residency area	Urban	31	62.0
	Rural	19	38.0
Family history of DDH	Yes	19	38.0
	No	31	62.0
Do you have any psychiatric disorders	Yes	0	0.0
	No	50	100.0
Child characteristics			

Gender of the Child	Male	8	16.0
	Female	42	84.0
Age of the Child	<= 1	15	30.0
	2	17	34.0
	3	14	28.0
	4	2	4.0
	5+	2	4.0
	Mean	2.10	
	SD.	1.16	
Birth order of the child in the family	1	16	32.0
	2	10	20.0
	3	8	16.0
	4	9	18.0
	5	5	10.0
	6	2	4.0
Types of delivery	Normal Vaginal Delivery	18	36.0
	Caesarean Section	32	64.0
Type of treatment	Surgical	29	58.0
	Non-Surgical	21	42.0

Table (2) below, however, provides the overall assessment of self-esteem among caregivers of children with DDH according to Rosenberg's self-esteem scale; it shows that the overall assessment of RSE is (low) at mean of scores equals to 1.882.

Table (2) Overall Assessment of Self-Esteem among Caregivers of Children with DDH

Levels	Freq.	%	Ms.	Asses.
Strongly Disagree	30	60.0	1.882	Low
Disagree	13	26.0		
Agree	6	12.0		
Strongly Agree	1	2.0		

Freq : Frequency ; MS : Mean of Scores ; Low: MS = 1-1.99 ; Moderate: MS = 2-2.99 ; Good: MS 3-4

Table (3) below illustrates the relationship between the overall assessment of self-esteem among caregivers of children with DDH and the different socio-demographic characteristics. It exposes that there is no significant relationship between the assessment of the Rosenberg's self-esteem scale for caregivers and their socio-demographic data (P>0.05); however, the marital status has a significant relationship (p value =0.03) .

Table (3) ANOVA table for the relationships between self- esteem among caregivers of child with Developmental dysplasia of the hip and different socio-demographic characteristics

Socio-Demographic Data	Ranking and Interval	Mean	SD.	F	Sig.
Who are caregiver	Father	2.00	0.42	0.78	0.46
	Mother	1.89	0.49		
	Sister	1.50	0.00		
Gender	Male	2.00	0.42	0.33	0.57
	Female	1.87	0.49		
Age (Years)	<= 27	1.98	0.58	0.75	0.48
	28 – 37	1.83	0.43		
	38+	1.76	0.28		
Mothers Age at Child's Birth (Years)	<= 27	1.98	0.51	1.64	0.20
	28 – 35	1.81	0.48		
	36+	1.64	0.13		
Number of children	<= 3	1.95	0.53	0.98	0.38
	4 – 6	1.74	0.36		
	7+	1.90	.		
Marital status	Married	1.85	0.42	5.06	0.03*
	Divorced	2.60	1.41		
Level of Education	Literate	1.80	0.23	0.81	0.50
	Primary	1.85	0.53		
	Secondary S.	1.82	0.42		
	College /High Education	2.09	0.62		
Participation in Trainings dealing with child having DDH	Not Once	1.89	0.49	0.30	0.59
	The once	1.70	0.14		
Working	Employed	1.99	0.53	0.40	0.75
	Free Work	1.82	0.29		
	Unemployed	1.88	0.51		
	Student	1.60	0.14		
Monthly Income	Sufficient	1.85	0.43	0.04	0.96
	Barely Sufficient	1.89	0.54		
	Insufficient	1.90	0.36		
Residency area	Urban	1.96	0.56	2.49	0.12
	Rural	1.75	0.27		
Family history of DDH	Yes	1.85	0.31	0.16	0.69
	No	1.90	0.56		
Child Characteristics					
Gender of the Child	Male	1.90	0.54	0.01	0.91
	Female	1.88	0.47		
Age of the Child (Years)	<= 1	1.96	0.55	1.44	0.23
	2	1.70	0.09		

	3	2.06	0.65		
	4	1.85	0.07		
	5+	1.60	0.00		
Birth order of the child in the family	1	1.88	0.51	0.61	0.70
	2	2.03	0.50		
	3	1.95	0.62		
	4	1.67	0.12		
	5	1.94	0.61		
	6	1.75	0.21		
Types of delivery	Normal Vaginal Delivery	1.91	0.52	0.07	0.80
	Caesarean Section	1.87	0.46		
Type of treatment	Surgical	1.93	0.53	0.72	0.40
	Non-Surgical	1.81	0.39		

* Significant at P<0.05 ; ** "Do you have any psychiatric disorders" is a constant Variable

Discussion

In Table (1), the analysis of findings revealed that most of the sample were married mothers of children with DDH, fall in the age group (<= 27) years old and age group (28-37). The highest percentage of the study sample is of primary school level of education with barely sufficient monthly income. These findings have revealed that parenting of DDH children fell overwhelmingly on the hands of mothers more than fathers; it was observed that more mother had responsibility of caring in the family as mothers play greater roles in their children's care than fathers, while fathers role is in business life, or sometimes no role at all . This finding was backed up by Rodrigue and his colleagues, who found that mothers accounted for 74% of all parents and also this agrees with a study of (12) whose results indicate that the more caregiver is the mother (93.9%)

The results showed that the majority of the subjects' job (66%) are housewives. In the point of view that is majority of research participants did not complete their education, and mother are in charge of the household and children care all the time. This result goes in line with (13) who found that (70%) of the sample are housewives. Supplementary support was found by (14) who found that (62.4%) of participants in the study were housewives.

In regards to the primary knowledge about DDH, according to the findings in current study, caregivers who have no primary knowledge about DDH represent the largest proportion than those with knowledge. This result agrees with (15).This study found that the majority had a low knowledge level regarding DDH. As for the family history, the study states that it is not found in most of the sample study (62%); this finding comes along with the study of (16) which found that most of participant are negative in the results of family history in (77.8%). The characteristics of children revealed that most of the children were girls. Such finding could be explained by the incidence ratio of DDH, which reflects that the incidence rate of DDH is higher in female than male because of the effects of more estrogen generated by the female. A study presented a supportive evidence to this result by (17) who found that the gender of child is girls (92.6%) and by (18) who showed (77%) of the children to be females.

The distribution of DDH children according to their age indicated that the majority of them fall in the age of two years old (34%). This results agrees with (19) who found that the majority of children with DDH

were 1-2 years old. Regarding the birth order of the child, the first order of child in family is highest (32%). This results is similar to (20) who found that the first child was higher than the second and later. Because when the mothers birth the first child the uterus and abdominal wall tightened and the pelvis is not exposed to pressure, it is more flexible and subject to deformation.

Table (1) showed that most of the study sample were delivered through caesarean section (64%). This result is similar to a study done by (21) who find that most (63.1%) of them delivered through caesarean section. These results can be interpreted by the abnormal baby position during pregnancy. In relation to the type of treatment, the study has shown that the surgical treatment of most of the children was the highest percentage (58%). These findings with (22) who found that the sample was treated surgically (52%). These results may be due to the delay in the diagnosis of DDH and due to the lack of awareness of DDH and neglecting the child.

Table (2) asserts that the majority of caregivers have low RSE Scale assessment; these results are similar to a study (23) which found that parents have low level of self-esteem to parenting of children.

Table (3) displays that there is a significant relationship between self-esteem among caregivers of DDH children and marital status; there is a significant relationship between the overall assessment of RSE scale and marital status; caregivers with married (48of total 50) have low self-esteem of RSE. There is no study found to support the result, but the researcher assumes such reasons according to the results of the research: married caregivers have low level of self-esteem because the many responsibilities and life burden affect the quality of the marital relationship, as the nature of the tasks of providing care for the variety of children (24) (25). Married caregivers may also face additional pressures within their marital

relationship, which could exacerbate stress and affect their self-esteem, as suggested by the possible explanations for the observed relationship between low self-esteem and marital status among caregivers of children with DDH (26).

Conclusion

The results of the current study showed that most of caregivers were to have low level of self-esteem, Marital status is statistically significant with self-esteem, while other socio-demographic characteristics of caregivers are not significant. All of the caregivers were under the age of fifty, and more than fifty percent of the caregivers' children were females (mothers). The highest percentage of the subjects were married, unemployed job, had a primary degree of education, and had a barely monthly income .The present study showed that DDH is more common among girls with highest percentage child's age of two years; children with DDH were treated with surgical treatment and had first birth order is highest percentage.

Recommendations

- Designing educational program for caregivers to improve the knowledge of parents of how to deal with their children
- Provideing DDH-related scientific books, articles, and journals and Caregivers who participate in social activities and caregiver support groups are more confident and have higher levels of self-esteem.

References

1. Ntshuntshe Z, Gqeba N, Livingstone Gqeba M, Majibha N. Self-Esteem: A Positive way to psychosocial well-being. Couns Ther. 2020;1–10.

2. Man Y, Mengmeng L, Lezhi L, Ting M, Jingping Z. The psychological problems and related influential factors of left-behind adolescents (LBA) in Hunan, China: A cross sectional study. Int J Equity Health. 2017;16(1):1–12.

3. Abdel-Khalek AM. Introduction to the Psychology of self-esteem. Managing. 2016;(October 2016):1–5.

4. Sowislo JF, Orth U. Does low self-esteem predict depression and anxiety? A meta- analysis of longitudinal studies. Psychol Bull. 2013;139(1):213–40.

5. Schachinger F, Farr S. The effects of preterm birth on musculoskeletal health-related disorders. J Clin Med. 2021;10(21).

6. Wakely L, Easey P, Leys J, Johnston C. Exploring the lived experience of parenting a child with developmental dysplasia of the hip. Phys Occup Ther Pediatr [Internet]. 2021;41(5):503–14. Available from: https://doi.org/10.1080/01942638.2020.1867694

7. Theunissen W, Steen MC Van Der, Veen V. Parental experiences of children with developmental dysplasia of the hip : a qualitative study. 2022;

8. Hussein KA, Authman NR. Quality of life for caregivers` of children with congenital heart disease in surgical specialty hospital – cardiac center kurdistan region/iraq. J Kufa Nurs Sci. 2013;100(2):96.

9. Issa IA, Mohammed SH. Psychological burdens on parents of children with cerebral palsy at rehabilitation centers in baghdad city. Kufa J Nurs Scinces. 2016;6(3):13–21.

10. Mroz EL, Poulin MJ, Grant PC, Depner RM, Breier J, Byrwa DJ, et al. Caregiver self-esteem as a predictor of patient relationship satisfaction: A longitudinal study. J Palliat Med. 2018;21(3):376–9.

11. Isa SNI, Ishak I, Ab Rahman A, Mohd Saat NZ, Che Din N, Lubis SH, et al. Health and quality of life among the caregivers of children with disabilities: A review of literature. Asian J Psychiatr [Internet]. 2016;23:71–7. Available from: http://dx.doi.org/10.1016/j.ajp.2016.07.007

12. Demir SG, Erden S, Bulut H, Carboga B, Elbas NO. The problems experienced by parents providing postoperative home care following their child's surgery for developmental dysplasia of the hip. Orthop Nurs. 2015;34(5):280–6.

13. AL-deen ALM. Assessment of psychological distress among pregnant women in kirkuk city. Mosul J Nurs. 2014;2(2):51–7.

14. Masulani-Mwale C, Kauye F, Gladstone M, Mathanga D. Prevalence of psychological distress among parents of children with intellectual disabilities in Malawi. BMC Psychiatry. 2018;18(1):1–7.

15. Alanazi MJ, Abokhesheim W, Al Saqer RM, Alasmari R, Alotaibi RM. Assessment of community levels of knowledge about developmental dysplasia of the hip, its risk factors, treatment, and complications in the riyadh region, Saudi Arabia. Cureus. 2022;14(10):1–13.

16. Ziegler CM, Ertl KM, Delius M, Foerster KM, Crispin A, Wagner F, et al. Clinical examination and patients' history are not suitable for neonatal hip screening. J Child Orthop. 2022;16(1):19–26.

17. Demirpence Secinti D, Albayrak ZS, Sen Demirdogen E, Albayrak K, Akipnar E, Turgut E, et al. The

affectivity in infants with developmental dysplasia of the hip and distress and depressive symptoms in their mothers. Arch Basic Clin Res. 2022;4(3):119–24.

18. Ortiz-Neira CL, Paolucci EO, Donnon T. A meta-analysis of common risk factors associated with the diagnosis of developmental dysplasia of the hip in newborns. Eur J Radiol. 2012;81(3):344–51.

19. Broadhurst C, Rhodes A, Harper P, Perry DC, Clarke NMP, & Aarvold A. What is the incidence of late detected developmental dysplasia of the hip (DDH) in England ? A 26-year national study of children diagnosed over 1 year of age. bone Jt journal,. 2019;

20. Zhu D, Zhu H. Incidence and epidemiological characters of developmental dysplasia of the hip in lianyungang: Based on ultrasound screening: A retrospective study. Int J Gen Med. 2022;15(December):8547–55.

21. Almas Y, Jamal BI, Lak R, Salih DA. Re-evaluation of DDH risk factors in helena rehabilitation center-erbil, kurdistan Region of iraq. J Sci Res Med Biol Sci ISSN. 2023;3(2):26–35.

22. Lisle R, Boekelaar M, Stannage K, Whitewood C. Delayed diagnosis of developmental dislocation of the hip: The Western Australian experience. ANZ J Surg. 2012;82(9):612–5.

23. Cantwell J, Muldoon O, Gallagher S. The influence of self-esteem and social support on the relationship between stigma and depressive symptomology in parents caring for children with intellectual disabilities. J Intellect Disabil Res. 2015;59(10):948–57.

24. Coulombe BR, Yates TM. Maternal caregiving, prosocial behavior, and self-esteem in middle childhood. Soc Dev. 2022;31(3):639–55.

25. Kim D. Relationships between caregiving stress, depression, and self-esteem in family caregivers of adults with a disability. Occup Ther Int. 2017;2017.

26. Cheng WL, Chang CC, Griffiths MD, Yen CF, Liu JH, Su JA, et al. Quality of life and care burden among family caregivers of people with severe mental illness: mediating effects of self-esteem and psychological distress. BMC Psychiatry. 2022;22(1):1–15.