

Original Article

The Analysis of Hopelessness Levels and Problem Solving Skills of Parents with the Disabled Children

Dilek Konukbay, PhD, RN

Gulhane Military Medical Academy, School of Nursing Etlik-Ankara, Turkey

Filiz Arslan, PhD, RN

Associate Professor, Yeditepe University Department of Nursing Istanbul, Turkey

Correspondence: Dilek Konukbay, Gulhane Military Medical Academy, School of Nursing Etlik-Ankara, Turkey
e-mail: dilek.konukbay@yahoo.com

Abstract

Background: Having a child with disabilities; creates intense family stress, changes family members' lifestyle, negatively affects their emotions, thoughts and behaviors.

Objective: This study investigated the parents of children with different disabilities in terms of level of hopelessness and problem-solving skills.

Method: This research consisted of 281 parents of children with disabilities. In order to gather data from the participants; Family Descriptive Information Sheet, Beck's Hopelessness Scale and Problem Solving Inventory were used.

Results: The parents' level of education, type of disability of the child, child's age, information level of the family regarding the disability, the problems experienced between the spouses due to the disability, social and spouse support as well as other professional counseling services were found to be effective on the level of hopelessness and problem solving skills.

Conclusion: By learning how to approach parents of children with disabilities, healthcare professionals become more familiar with the factors affecting hopelessness and problem-solving skills of these families. Development of continuous educational programs on problem-solving methods is also recommended.

Key Words: Children with disabilities, parents, hopelessness, problem solving

Introduction

Having a child with disabilities creates intense stress on the family, affects family members' lifestyle, feelings, thoughts and behaviors. Such families need support and assistance in order to overcome the negative circumstances coming along with the disabilities (Sapountzi-Krepia et al. 2006; Bourke-Taylor et al. 2009; Karasavvidis et al. 2011; Hu, Wang & Fei 2012). It is found that the parents with disabled children face many difficulties and mostly worry in the economical, psychosocial, educational areas as well as in the child care and future expectations. From time to time, due to negative emotions, they lose hope, thus family conflicts and problems in social relations start and they seek for methods to overcome these undesirable

circumstances. (Karadag 2009; Bourke-Taylor, Howie & Law 2010; Huang et al. 2011).

In the literature, it is stated that there is a reverse relation between the "negative life stress, depression symptoms, crisis, permanent anxiety/hopelessness" and the "problem solving skills". Individuals who has poor problem solving skills experience negative life events much more with an increased desperation, and teaching them how to cope with the problems decreases psychological stress as well as its outcomes and origin (Heppner & Witty 2004; Lopez & Janowski 2004; Dundar 2008; Dukmak 2009; Keskin et al. 2010; Oguzturk, Akca & Sahin 2011). In the approach to the parents of the children with disabilities, a comprehensive research on perception of hopelessness and problem solving skills affecting

psychological balance is a guide in giving advice and support to families by health personnel and the nurses - as a member of this team. While the literature contains many studies on hopelessness and problem solving skills, there are relatively limited researches focused on studying the relations between the hopelessness levels and problem solving skills of the parents with the disabled children.

This research aimed to study different levels of hopelessness and problem solving skills of the parents with a disabled child.

Materials and Methods

This research is a descriptive study and involves mothers and fathers of 281 disabled children (total of 562 people) who agreed to participate in the research and corresponded to the formed criteria of model selection. The children were under the supervision of special education centers in the province of Turkey, Ankara at the time of the study. In the creation of the sample, necessary permissions were obtained to get the list of the special education centers and the names of the patients at these centers, then those centers with more than 100 disabled children were selected. During the sample creation process, each special education center was considered as one separate group and 14 special education centers were chosen in accordance with "Group selection method".

For the purpose of determining the number of participants in each disabled group (mental and physical, physical, mental, hearing impaired and autistic) "Stratified sampling method" were taken into account and used in 14 selected special education centers. The parents of the disabled children in these centers were selected according to the following criteria: The parent who; 1. does not have any physical or mental health problem; 2. has one disabled child; 3. is married and lives with his/her family; 4. is the real parent of the disabled child; and 5. whose child's disability is diagnosed. Before using the questionnaires in the research, the parents participating in the research were explained about the aim of the research. Due to the fact that fathers are at work during the day, mothers are mostly to take the children to the centers and bring them back home. Therefore, the researcher went to the centers at specified days given by the education centers, met with the mothers of disabled children who agreed to participate, filled out questionnaires and finally sent questionnaires to fathers of these children and then collected them all. At some meetings, the researcher filled out the forms with the

mother, but there were some cases where father refused to do so. At this point, neither of the parent's answers were taken into account, and continued with the other selected parents in the list. If there were some questions skipped by the father who agreed to participate, the researcher had a telephone conversation with this person, appointed meeting, ensured his appearance at the center and filled out unanswered questions.

Data Collection

In the research levels of hopelessness and problem solving skills of the parents with a disabled child are studied according to some variables (i.e. age of the mother and father, education level, number of children, child's disability, child's age, gender, duration of the special education and time of diagnosis, parents' awareness level of the disability, getting social support, problems in parents' relationship, getting consultation). At the data collection stage of the research, the researcher formed a 23-question "Family Identification Information Form" based on the literature in order to familiarize with the disabled child's parents and the variables, which may affect and control the parents' hopelessness and problem-solving skills. Beck's 20 item "The Hopelessness Scale" and Heppner & Petersen's 35 item "The Problem Solving Inventory" (Beck et al. 1974; Heppner & Petersen 1982) were used as well.

Statistical Analysis

The data obtained from the research was processed by SPSS 15.00 package program, using Frequency Distribution and Percentage, Arithmetic Average and Standard Deviation, Student's t-Test and Dispersion Analysis. At the time of comparing statistically significant levels between the pair groups during Dispersion Analysis "Tukey's HSD Test" was used for differentiating the variables. For all analysis, value $\alpha=0.05$ was selected as an error level and p-value smaller or equal to this error level was considered to be "statistically significant".

Results

75.80% of mothers and 91.80% of fathers in the area of the research are 31 years old and above. The average age of mothers is (35.19 ± 6.89) and the average age of fathers is (38.66 ± 6.20) . When the education level of mothers is considered 45.60% of them had a primary school education, while 31.70% of the fathers graduated from the high school and

32.40% of the fathers had a university and a master's degree.

Regarding the parents' profession, most of the mothers are (84.70%) housewives, 47.60% of the fathers are employed. As for the number of children in the family, half of families (50.10%) have two children (Table 1).

Almost half of the disabled children in the area of the research are 6-10 years old and their average age is 8.58 ± 4.70 , the majority of the children is male gender (65.10%), hearing impaired (74%), mental illness (68%), in accordance with the birth order almost half of them (46.60%) are the first child, the disability diagnosed at the age of 0-6 months is 40.90% and more than half of the children (52.70%) took special education 2 to 5 year period (Table 2).

In the comparison of the average scores got by the mothers and fathers in accordance with Beck's "The Hopelessness Scale" ($t=0.564$, $p=0.573$) and "The Problem Solving Inventory" ($t=1.771$, $p=0.077$) there was no statistically significant difference found between them. In the area of the research, there was statistically significant difference between the "hopelessness levels" of mothers and fathers and the research items of "age, education level, child's disability level and age, duration of special education, parents' belief in having sufficient level of information, having problems with the spouse due to the child's disability, getting enough support or assistance". There was no statistically significant difference found between "the hopelessness levels" and the "gender of the disabled child, the number of children in the family and the child's disability" (Table 3, Table 4).

There was statistically significant difference between the "problem solving skills" of mothers and fathers and the items of "education level, child's disability level and age, time of diagnosis of the disability, parents' belief in having sufficient level of information, having problems with the spouse due to the child's disability, getting enough support or assistance". There was no statistically significant difference found between "the problem solving skills" and "the parents' age, duration of the special education, gender of the disabled child and the number of children in the family" (Table 5, Table 6).

Discussion

Regarding the education level of the parents of disabled children, there was a statistically significant difference between education level and average

hopelessness scores of mothers, while there was no significant statistical difference between average scores of fathers (Table 3). It was determined that the higher the education level of mothers; the lower the average score of hopelessness. Coskun and Akkas stated in their research that the higher the mother's education level, the lower the level of anxiety (Coskun & Akkas 2009). Statistically not significant difference which was found in the education levels of fathers was considered to be due to majority of the fathers having high education levels (Table 1, Table 3).

It is thought that the higher the parents' education level, the more he/she is aware of the child, the child's disability and what the child can/can't do, such parents are more conscious and emotional, and because of the fact that the parent can better understand the social and government support, which simplifies the adaptation process thus the parent's level of hopelessness decreases.

When the child's disability level was compared with the average score of the parents' hopelessness level, it was found that the difference between the average score of the fathers' hopelessness was statistically significant while the difference between the average score of the mothers' hopelessness was not statistically significant (Table 3). Although the difference between the average score of the mothers' hopelessness was not statistically significant, the hopelessness level of the mothers of both mentally and physically disabled child was relatively higher than that of fathers in other disability groups (Table 3). In the literature it is stated that children's behavior problems, their lack of communication skills, disability type and illness level, increase the anxiety and stress level of the parents (Pelchat, Lefebvre & Levert 2007; Akandere, Acar & Bastug 2009; Azar & Kurdahi 2010; Xin & Jennifer 2012)

This study also showed that the parents' average hopelessness score increased along with the child's age (Table 3). The literature defines that as the child's age increases; mothers and fathers are more likely to suffer from the stress and anxiety derived from the child's beginning to school, sexual development and school graduation (Lopez & Janowski 2004; Bahar et al. 2009). When the relation between the duration of special education and the parents' hopelessness level was studied, it was found that the longer the duration of special education, the higher the average score of parents' hopelessness level (Table 3). Parents may expect that during the process of getting special education, the level of

familiarization with their children and their disability will increase and they will be able to find out ways for right the solution. However, according to our research, it can be said that teaching starts with great hopes and when the process does not meet the expectations of the parents, education sooner begins to cause negative emotions on parents.

As it can be seen from Table 4, if parents believe that they have a sufficient level of information regarding the child's disability, as a result the average score of hopelessness decreases. In the literature it is described that if the family is not well informed regarding the health of their child, it causes a main stress factor for the family. While mothers and fathers who possess enough information successfully overcome the stress causing factors, others have a high and an increasing level of anxiety when there is insufficient information. With there are adequate facts regarding the child's disability, parents more easily adapt to the child's illness, perceive and increase the child's capacity and make a proper planning when concerning the child's future (Parkes et al. 2009; Krstić & Oros 2012). When the average hopelessness scores of getting enough assistance and support with regard to the child's disability were compared, it was found that as the level of getting sufficient support and help increased, parents' average score of hopelessness decreased (Table 4).

In the literature it is stated that the social support for the parents of the disabled children is a decreasing coefficient factor for hopelessness and stress level. As long as the family and environment support increase, the negative emotions and anxiety of parents decrease, and parents who receive active support have higher level of coping with stress causing factors (Melnyk & Feinstein 2001; Safe, Joosten & Molineux 2012; Janvier, Farlow & Wilfond 2012;).

When the connection between the problems caused by the child's disability in the parents' relation and the hopelessness levels were studied, it was seen that there was a direct correlation between the average hopelessness score and the problems happened in the relationship (Table 4).

Chronic illness of a child usually affects the relations between spouses, but over the years it makes them closer to each other. Establishing good relations between parents, unity, mutual support and trust of spouses and sharing responsibilities have positive impacts on parents' moods and increase coping skills with the stress causing factors, as stated in the

literature. (Hill & Rose 2009; Mitchell & Hauser-Cram 2010).

Parents having a high level of education were found to have a low average scores of problem solving, thus a reverse relation can be mentioned when the problem solving skills of mothers and fathers are considered in accordance with education level (Table 5). Decrease in the average score of problem solving indicates that when the education levels of parents increase, parents perceive themselves sufficient enough in problem solving issues. Regarding the problem solving inventory which has been used for almost 20 years, Heppner & Witty showed in their study that individuals with a high level of education, have a positive approach to problem solving and have a higher problem solving skill (Heppner & Witty 2004).

Considering the relation between the determination time of child's illness and the parents' average score of problem solving, it was figured out that when the diagnosis time is delayed, parents' perceive their problem solving skills inadequate with the extension of diagnosis time (Table 5). Parkes in his research indicates that diagnosing time of a child's disability affects mothers and fathers anxiety level (Parkes et al. 2009).

Melnyk and Feinshtein in their study indicate that main stress factor for fathers is nebulosity of diagnosing process, when the diagnosis is not determined fully, when the family is not aware of a child's status, uncertainty and these related factors increase their stress level (Melnyk & Feinstein 2001). Increase in the stress level has a negative impact on problem solving, which is also pointed out in our research and this finding completely agrees with the works of Parkes, Melnyk and Feinstein.

In our study, it was also seen that parents themselves realize the child's problems quite early, but due to the long duration of diagnosis of the illness, the starting of the treatment and the special education are delayed in return the parents feel annoyed and dissatisfied because of lost time during this period.

Parents belief in themselves to have adequate level of information on the child's disability, getting sufficient support, help and consultation from medical personnel about the child's illness, and in addition to these factors, having less problems in the relationship with the spouse, they see themselves much competent in solving skills (Table 6).

Table 1. Demographics of parents in the study

Descriptive Properties	Mothers (n=281)		Fathers (n=281)	
	n	%	n	%
<u>Parent's Age</u>				
≤ 30 years	68	24.20	23	8.20
≥ 31 years	213	75.80	258	91.80
<u>Education Level</u>				
Primary School	128	45.60	50	17.80
Mid-School	30	10.70	51	18.10
High School	83	29.50	89	31.70
University/Masters Degree	40	14.20	91	32.40
<u>Job/Work</u>				
Government	33	11.70	134	47.60
Labour	0	0.00	90	32.10
House Wife	238	84.70	0	0.00
Self Employed	1	0.40	40	14.20
Retired	8	2.80	12	4.30
Private Business	1	0.40	5	1.80
<u>Number of Children in the Family</u>				
One Child	69	24.60	69	24.60
Two Children	141	50.10	141	50.10
Three Children	52	18.50	52	18.50
Four Children and above	19	6.80	19	6.80
<u>Savings vs. Spendings</u>				
Savings overcome expenses	8	2.80	8	2.80
Expenses overcome savings	165	58.80	165	58.80
Equal amount of savings & expenses	108	38.40	108	38.40
TOTAL	281	100.00	281	100.00

Table 2. Demographics of Disabled Children in the Study

Descriptive Properties	n	%
<u>Age</u>		
0-5 years	74	26.60
6-10 years	130	45.70
≥ 11 years	77	27.70
<u>Child's Gender</u>		
Girl	98	34.90
Boy	183	65.10
<u>Disability of the Child</u>		
Mental and Physical Disability	60	21.40
Physical Disability	43	15.30
Mental Disability	68	24.20
Hearing Disability	74	26.30
Autism	36	12.80
<u>Nth Child in the Family</u>		
First Child	131	46.60
Second Child	102	36.30
Third Child	36	12.80
Fourth Child and above	12	4.30
<u>Diagnosis Time of Disability</u>		
0-6 months	115	40.90
7 months - 1 year	59	21.00
≥ 2 years	107	38.10
<u>Special Education Duration</u>		
0-1 year	50	17.80
2-5 years	148	52.70
≥ 6 years	83	29.50
TOTAL	281	100.00

Table 3. Comparison of Parents' Beck's Hopelessness Level Average Scores with Demographics, Disability of the Child, Diagnosis Time of Disability and Special Education

Descriptive Properties		Parents' Beck's Hopelessness Level Average Scores	
		Mother (n=281) \bar{X} (\pm ss)	Father (n=281) \bar{X} (\pm ss)
Age	≤ 30 years	6.69 (4.19)	6.48 (4.18)
	≥ 31 years	7.70 (4.59)	7.78 (4.64)
t (p)		1.611 (0.108)	1.298 (0.195)
Education Level	Primary School	8.21 (4.34)	8.38 (4.28)
	Mid-School	8.20 (4.29)	8.78 (4.50)
	High School	6.88 (4.74)	7.27 (4.25)
	University/Masters Degree	5.68 (4.14)	7.05 (5.08)
F (p)		4.139 (0.007)	2.177 (0.091)
Disability of the Child	Mental and Physical	8.17 (4.77)	8.90 (4.98)
	Physical	7.70 (4.68)	8.14 (4.74)
	Mental	7.90 (4.57)	7.94 (4.37)
	Hearing Disability	6.66 (4.14)	6.97 (4.28)
	Otism	6.78 (4.35)	6.00 (4.449)
F (p)		1.351(0.251)	2.917(0.022)
Child's Age	0-5 years	6.80 (4.48)	7.81 (4.95)
	6-10 years	7.10 (4.20)	7.00 (4.44)
	≥ 11 years	8.70 (4.82)	8.70 (4.37)
F (p)		4.220 (0.016)	3.372 (0.036)
Special Education Duration	0-1 year	6.12 (3.94)	7.02 (4.73)
	2-5 years	7.51 (4.63)	7.30 (4.62)
	≥ 6 years	8.16 (4.48)	8.73 (4.40)
F (p)		3.264 (0.040)	3.244 (0.041)
Child's Gender	Girl	7.87 (4.53)	7.78 (4.51)
	Boy	7.23 (4.49)	7.62 (4.68)
T (p)		1.149 (0.251)	0.273 (0.785)
Number of Children in the Family	One Child	6.94 (4.49)	7.32 (4.63)
	Two Children	7.77 (4.60)	7.63 (4.90)
	Three Children	7.29 (4.44)	8.15 (4.20)
	Four Children and above	7.47 (4.21)	7.95 (3.50)
F (p)		0.543 (0.653)	0.348 (0.791)
Diagnosis Time of Disability	0-6 months	7.01 (4.40)	7.45 (4.30)
	7 months - 1 year	7.97 (4.80)	8.37 (4.97)
	≥ 2 years	7.65 (4.46)	7.52 (4.73)
F (p)		1.048 (0.352)	0.867 (0.421)

Table 4. Comparison of Parents' Beck's Hopelessness Level Average Scores in having sufficient level of information, getting support, getting assistance and problems with the spouse due to the disability of the child

ITEMS		Parents' Beck's Hopelessness Level Average Scores	
		Mother (n=281) \bar{X} (\pm ss)	Father (n=281) \bar{X} (\pm ss)
Parents' belief in having sufficient level of information on the child's disability	Sufficient	6.50 (4.07)	6.93 (4.91)
	Moderate	8.27 (4.65)	8.39 (4.64)
	Insufficient	8.78 (5.04)	8.05 (5.18)
F (p)		6.542 (0.002)	3.400 (0.035)
Getting sufficient support and assistance due to the child's disability	Yes	5.57 (3.72)	6.23 (3.80)
	Partially	8.12 (4.59)	7.90 (4.66)
	No	9.61 (4.42)	10.24 (5.17)
F (p)		13.119(<0.001)	8.029 (<0.001)
Having Problems with Spouse due the child's Disability	Yes	8.65 (4.71)	10.86 (5.05)
	Partially	8.48 (4.62)	8.46 (4.60)
	No	5.97 (3.89)	5.93 (3.87)
F (p)		11.668(<0.001)	16.923(<0.001)
Getting Professional Assistance from Health Care Personnel	Yes	5.90 (3.99)	6.71 (4.32)
	Partially	8.23 (4.87)	7.95 (4.57)
	No	8.19 (4.26)	8.20 (4.80)
F (p)		8.565 (<0.001)	2.667 (0.071)

Table 5. Comparison of Parents' Problem Solving Skills Inventory Average Score with Demographics, Disability of the Child, Diagnosis Time of Disability and Special Education

Descriptive Properties		Problem Solving Skill Inventory Average Score	
		Mother (n=281) $\bar{X} (\pm ss)$	Father (n=281) $\bar{X} (\pm ss)$
Age	≤ 30 years	87.84 (19.44)	85.87 (17.75)
	≥ 31 years	89.25 (20.58)	85.91 (20.18)
t (p)		0.498 (0.619)	0.009 (0.993)
Education Level	Primary School	93.66 (20.34)	95.30 (18.99)
	Mid-School	97.37 (21.83)	90.31 (19.86)
	High School	83.75 (16.62)	82.47 (19.12)
	University/Masters Degree	77.82 (19.01)	81.63 (19.42)
F (p)		10.787(<0.001)	7.242(<0.001)
Disability of the Child	Mental and Physical	91.87 (19.67)	86.20 (18.14)
	Physical	82.14 (19.61)	86.44 (20.70)
	Mental	95.84 (22.71)	90.63 (21.24)
	Hearing Disability	86.89 (17.73)	85.26 (20.66)
	Autism	83.00 (18.01)	77.17 (15.58)
F (p)		4.657 (0.001)	2.776 (0.027)
Child's Age	0-5 years	85.36 (19.42)	85.05 (20.83)
	6-10 years	89.28 (19.65)	84.08 (19.46)
	≥ 11 years	92.12 (21.46)	90.03 (19.76)
F (p)		2.135 (0.120)	2.248 (0.108)
Special Education Duration	0-1 year	86.16 (19.44)	86.94 (20.55)
	2-5 years	89.35 (20.46)	84.48 (19.79)
	≥ 6 years	89.81 (20.57)	87.82 (19.99)
F (p)		0.573 (0.564)	0.825 (0.439)
Child's Gender	Girl	90.92 (21.63)	87.03 (18.55)
	Boy	87.84 (19.50)	85.30 (20.71)
t (p)		1.214 (0.226)	0.692 (0.490)
Number of Children in the Family	One Child	87.75 (21.11)	83.38 (19.95)
	Two Children	87.62 (20.30)	85.53 (20.44)
	Three Children	92.71 (19.35)	89.29 (18.63)
	Four Children and above	92.26 (19.50)	88.58 (20.04)
F (p)		1.045 (0.373)	0.996 (0.395)
Diagnosis Time of Disability	0-6 months	85.57 (20.88)	81.67 (17.45)
	7 months - 1 year	92.61 (17.90)	89.95 (19.33)
	≥ 2 years	90.44 (20.52)	88.22 (22.08)
F (p)		2.869 (0.058)	4.636 (0.010)

Table 6. Comparison of Parents' Problem Solving Skills Inventory Average Score with having sufficient level of information, getting support, getting assistance and problems with the spouse due to the disability of the child

ITEMS		Problem Solving Skills Inventory Average Scores	
		Mother (n=281) \bar{X} (\pm ss)	Father (n=281) \bar{X} (\pm ss)
Parents' belief in having sufficient level of information on the child's disability	Sufficient	82.26 (18.97)	81.40 (19.22)
	Moderate	94.18 (19.38)	90.20 (20.80)
	Insufficient	99.88 (19.30)	88.75 (12.08)
F (p)		17.729(<0.001)	6.826 (0.001)
Getting sufficient support and assistance due to the child's disability	Yes	83.80 (20.61)	79.93 (20.17)
	Partially	90.66 (19.74)	87.78 (19.55)
	No	95.04 (20.05)	89.60 (19.56)
F (p)		4.526 (0.012)	4.619 (0.011)
Having Problems with Spouse due the child's Disability	Yes	93.00 (19.07)	90.09 (19.12)
	Partially	92.73 (21.24)	89.40 (21.41)
	No	83.52 (18.33)	80.17 (16.59)
F (p)		7.433 (0.001)	7.594 (0.001)
Getting Professional Assistance from Health Care Personnel	Yes	80.11 (20.42)	81.53 (19.78)
	Partially	92.67 (19.63)	86.85 (20.11)
	No	93.77 (18.08)	88.63 (19.57)
F (p)		14.209(<0.001)	3.067 (0.048)

Conclusions

As a result of this research, it was revealed that mothers' and fathers' education level, child's disability status and age, parent awareness level of child's disability, getting sufficient support and assistance, problems in relation with spouse and help from the medical personnel are the main factors which have a significant impact on hopelessness levels and problem solving skills.

Herewith, it is found out that disabled child's gender, mother's and father's age, child number in the family and diagnosis date of a child's disability does not affect hopelessness level, while mother's and father's age, duration of special education reception by a child, gender and number of children in the family is not an important factor in terms of problem-solving skills.

We believe that the information with regard to the factors affecting families' hopelessness and problem solving skills will promote medical personnel in terms of approach for disabled child parent and will be useful for developing long-term education programs related to problem solving methods. The results achieved by this study and taking into account of the outcomes of the research will be of guidance for these similar subjects and for the future studies.

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