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Original Article

The Religious Coping and Quality of Life in Mothers of Children with Hearing Deficiency

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Objectives: The present study aimed to investigate the relationship between religious coping and quality of life of mothers of children with hearing deficiency.

Methods: In this study, 55 mothers of children with hearing deficiency referred to Isfahan Cochlear Implant Center, from June to August 2012, were selected through applying census method. The participants answered the questionnaires of Religious Coping and Quality of Life (FS36).

Results: Results of correlation analysis indicated that there was a significant negative relationship between negative emotions toward God and the mental dimension of quality of life. Moreover, there was a significant positive relationship between benevolent appraisal and the physical dimension of quality of life. Regression analysis showed that negative emotions could explain 7.2% of variations in the mental dimension of respondents' quality of life.

Discussion: The increase in negative religious coping behaviors (e.g. negative emotions toward God) was associated with reduction of quality of life of mothers of children with hearing deficiency.

Keywords: Religious Coping, Quality of Life, Mothers of Children with Hearing Deficiency

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Introduction

The birth and presence of an exceptional child in a family can be considered as an undesirable challenging event that is possibly associated with stress, frustration, sadness and despair (1) and reduces mental health and increases stress in the family subsystems (2). The birth of children with disabilities reduces parents' self-esteem and self-efficacy, causing frustration and distress, which eventually lead to various levels of depression causing trauma for all members of the family and affecting their functions (3,4). Hearing loss is the most important cause of disability in children which is associated with a series of educational and social problems. From the family perspectives, hearing loss is the most stressful disability (5). Research evidence suggests that severe symptoms of depression and chronic sorrow (6), stress (7), depression, anxiety, sleep disorders and somatic symptoms (5), concern and anger (8), impaired quality of life (9) are all among the issues that parents of children with hearing deficiency have reported.

Quality of life is a broad concept that includes feeling of wellbeing and having a sense of self-satisfaction and general self-value (10) and it is based on people's understanding of various aspects of life (11). Research evidence suggests massive impact of children with disabilities on the quality of life of their families, especially their parents. Allik, et al. indicated that mothers of children with Autism and Asperger have diminished physical health (12). Results of Mugno, et al. revealed that parents of children with pervasive developmental disorders have lower levels of physical, emotional and social interactions (13).

Ones, et al. (2005) found that mothers of children with cerebral palsy have a higher level of depression and lower level of quality of life (14). Results of Khayat Zadeh Mahani indicated that there is a significant difference among mothers of normal

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children, mothers of children with mental deficiency and mothers of children with cerebral palsy in all dimensions of quality of life (15). Burger, et al. mentioned that parents of children with cochlear implants reported reduced stress and increased quality of life, while parents of children with hearing aids reported increased stress and reduced quality of life (16). In Jackson, et al.'s study, families reported lower levels of satisfaction in terms of emotional health. They stressed that their emotional health was mostly influenced by their children's hearing deficiency and families with children who received hearing cochlear and established verbal communication with others had higher levels of emotional health compared to families with children with hearing aids (17). Nowadays, particular attention is paid to components which have a great role in the quality of life. One of these components is religion/religious coping. Pargament believes that individuals cannot cope with stressors without any support. They have a system of beliefs, practices, aspirations and relationships that outline how to behave in difficult moments and religion is one of these orientation systems (18). Having a meaningful and purposeful life, having a sense of belonging to a sublime source, having trust in God's help and assistance in troubled circumstances of life, are all sources with which individuals can endure minor trauma when facing stressful life events. Religious coping is defined as a method in which religious resources such as prayer, trust, and appeal to God are used as coping instruments (19).

Recent findings have shown that this kind of coping is employed as both sources of emotional support and a means to positive interpretation of life events (20) and improves individuals' quality of life. In Lucchetti, et al.'s study, religiosity was significantly associated with fewer depressive symptoms, better quality of life and lower psychological disorders (21). Hills, et al. indicated that individuals who expressed their anger toward God or questioned God were more anxious and their quality of life was negatively affected by their negative coping (22). Result of a two-year longitudinal study conducted on 268 elderly patients admitted to a hospital revealed that negative religious coping methods have risky effects on patients' physical and mental health. On the other hand, the use of positive religious coping was associated with improved health status (23). Pearce, et al. (2006) found that greater use of positive religious coping was associated with more satisfaction, while greater use of negative religious coping was associated with lower levels of quality of life, satisfaction and increased risk of major depression and anxiety disorders (24). Tarakeshwar, et al. found that greater use of positive religious coping is associated with better quality of life in general and higher scores on the existential and support dimensions of quality of life, while greater use of negative religious coping is associated with lower quality of life in general and lower scores on the existential and mental dimensions of quality of life (25). Norhayaty's study, carried out on 274 patients, indicated that there was a significant positive relationship between social support and religious coping strategies with both physical and mental aspects quality of life (26). With regard to the above-mentioned literature, the present study aims to investigate the effect of religious coping on quality of life of mothers of children with hearing deficiency.

Research questions were: 1) Is there any significant relationship between religious coping and quality of life among mothers of children with hearing deficiency? 2) Which component of religious is the most powerful predictor of quality of life?

Methods

This is a correlational study. The population consisted of all the mothers of children with hearing deficiency who referred to Isfahan Cochlear Implant Center from June to August 2012 and their children received the implant and passed the rehabilitation process in the center or their children's cochlear was among the candidates for implanting and passed early stages of implanting. Participants were asked to complete the questionnaires. Among all the participants, five individuals were not eager to cooperate and ten individuals did not deliver the questionnaires. The sample included 55 mothers selected through applying census method. After referring to Isfahan Cochlear Implant Center and obtaining participants' consent, the questionnaires were prepared. Afterward, with providing essential explanations to mothers of children with hearing deficiency about responding the questionnaire, the questionnaires were delivered to the participants by the researcher. Therefore, mothers answered the questions of Quality of Life and Iranian Religious Coping Questionnaires individually.

Iranian Religious Coping Scale developed by Aflak Seir and G. Colman including 22 five-point Likert type items from zero (never) to four (always). Items of the scale are designed through applying Islamic texts and resources like the Quran and Tradition as well as conducting interviews which provide

information about Iranian Muslims' coping styles when dealing with pressure. It has two dimensions, i.e., positive religious coping and negative religious coping, and five subscales, i.e., religious activities, religious benevolent appraisal, active religious coping strategies (positive dimension), negative emotions toward God and passive religious coping strategies. In a sample of 185 Shiraz University students, the internal consistency of the scale for religious activities, benevolent appraisal, negative emotions toward God, passive coping and active coping, using Cronbach's alpha coefficient, was 89%, 79%, 79%, 72%, and 79%, respectively (27). The 36-item Quality of Life Questionnaire was developed by Sherbon Ware in the USA. The reliability and validity of the scale has been studied among different groups of patients. It includes 8 dimensions (physical performance, physical role limitations, body pain, general perception of health, power and energy, social performance, emotional role limitations and mental health). It is divided into mental and physical dimensions. The questionnaire is globally standard and it is validated by Montazeri, Goshtasbi and Vahdani Nia in Iran. In Montazeri, et al.'s study, the internal consistency analysis indicated that except for the vitality scale (α= 65), all dimensions of the Quality of Life Questionnaire has a standard minimum reliability in the range of 77% to 90% (28).

Results

The statistical analysis of the obtained data was performed on two descriptive and inferential levels. On the descriptive level, mean and standard deviation and on the inferential level, correlation and stepwise regression analysis were used. Results in Table (1) indicate that the mean value of components of negative emotions and passive coping is smaller than the test value (2.5), while the mean value of components of religious activity, benevolent appraisal and active coping is higher than the test value (2.5). Distribution of scores for religious activity is more than that for other components.

Table 1. Mean and standard deviation of the components of religious coping (55 subjects)

Component	Mean	SD
Religious activity	2.98	0.93
Negative emotions	1	0.81
Benevolent appraisal	2.77	0.68
Passive coping	1.01	0.88
Active coping	3.1	0.71

As Table (2), participants' mean quality of life (2.83) is significantly smaller than the test value (3); however, the mean value of mental dimension (3.12) is higher than the mean value of physical dimension (2.83). Regarding the mental dimension, mental health has the highest mean value (3.7) and mental limitation has the lowest mean value (1.55). Regarding the physical dimension, the general perception of health has the highest mean value (3.45) and the component of physical component has the lowest mean value (1.56). Comparison of SD values also indicates that the distribution of participants' scores on the mental dimension (0.45) is more than physical dimension (0.31).

Table 2. Mean and standard deviation of dimensions of quality of life (55 subjects)

Dimensions	Component	Mean	SD
	Social Performance	3.23	1.07
	Power-Energy	3.52	0.62
Mental	Mental limitation	1.55	0.38
	Mental Health	3.7	0.67
	Total (mental dimension)	3.12	0.45
	general perception of health	3/45	0.5
	Pain	2.9	1.07
Physical	Physical role	1.56	0.4
	Physical Performance	2.55	0.43
	Total (physical dimension)	2.65	0.31
	Quality of life	2.83	0.3

Table (3) indicates that there is a significant positive relationship between the component of benevolent appraisal and physical dimension ($r=0.252$, $p<0.05$) on 0.05 level. There is also a significant negative

relationship between negative emotions and mental dimension (r=-0.299, p≤0.05) on 0.05 level. Components of religious activities, passive coping and active coping are not significantly related to any of the dimensions of quality of life.

Table 3. Correlation of dimensions of quality of life and components of religious coping

Variables	Religious activity	Negative emotions	Benevolent appraisal	Passive coping	Active coping
Physical dimension	-.012	-.075	.252*	-.117	.094
Physical dimension	-.016	-.229*	-.019	-.038	-.002

**p>.05
*p<.01

Results of F test indicate that the component of religious coping is not a good model to predict the physical dimension of quality of life (F=1.5, df=5, 49, sig=0.2) (table 4).

Table 4. Results of stepwise regression to predict physical dimension of quality of life based on the components of religious coping

model	R	R Adjusted	B	SD	Beta	t	F	sig
Religious activity			-0.736	0.46	-0.39	-1.9		
Negative emotions			0.004	0.34	0.002	0.012		
Benevolent appraisal	37.0	0.4	0.738	0.31	0.44	2.4	1.5	0.2
Passive coping			0.177	0.38	-0.06	-0.47		
Active coping			0.260	0.44	0.13	0.6		

According to table (5), among the 5 predictor variables (religious activity, negative emotions, benevolent appraisal, passive coping and active coping), only negative emotions entered into the equation, so that the correlation of this variable with the mental dimension of quality of life is 0.299. In other words, negative emotion alone explains approximately 7.2% of variations of mental dimension of quality of life of mothers of children with hearing deficiency (R2=.072). As can be seen, variables of religious activity, benevolent appraisal, passive coping and active coping do not have any role in predicting the mental dimension of quality of life. Moreover, the component of negative emotions has a significant negative correlation with the mental dimension of quality of life (Beta = 0.299, p ≤ 0/01), so that a unit increase in negative emotions of mothers of children with hearing deficiency reduces as much as 0.299 unit of the mental dimension of their quality of life.

Table 5. Results of stepwise regression analysis to predict the mental dimension of quality of life based on the components of religious coping

Template	R	R Adjusted	B	SD	Beta	t	F	sig
Negative emotions	0.299	0.072	46.031	1.31	-0.299	35.2	5.21	0.2
			-0.58	0.254		-2.3		

Discussion

Considering the first research question about significant relationship between religious coping and quality of life among mothers of children with hearing deficiency, the results of the correlation analysis indicated that there was a significant negative relationship between negative emotions toward God and the mental dimension. In addition, benevolent appraisal had a significant positive correlation with the physical dimension and passive coping and active coping were not significantly related to any dimensions of quality of life. The results are consistent with the results of previously conducted research studies. Hills, et al. found that the quality of life of individuals who expressed their anger toward God or questioned God were more anxious and their quality of life was negatively affected by their negative coping (22). Pargament, et al. found that the use of negative religious coping strategies is associated with lower physical and mental health, while applying positive religious coping is associated with improved health status (23). Pearce indicated that greater use of positive religious coping is associated with more satisfaction, while greater use of negative religious coping is associated with lower levels of quality of life,

satisfaction and increased risk of major depression and anxiety disorders (24). Also Norhayati, et al. indicated that patients who used positive religious coping strategies had a better quality of life in both physical and mental dimensions.

In the present study, there was a significant positive relationship between benevolent appraisal and physical dimension of quality of life. However, no relationship was found between benevolent appraisal and mental dimension of quality of life (26). Tarakeshwar, et al. found that greater use of positive religious coping is associated with better quality of life in general, and higher scores on the existential and support dimensions of quality of life, while greater use of negative religious coping is associated with lower quality of life in general, and lower scores on the existential and mental dimensions of quality of life (25) In the present study, there was a significant positive relation between benevolent appraisal and physical dimension of quality of life and there was a significant negative relationship between negative emotions towards God and the mental dimension (25). Regarding the second question, i.e., Which component of religious is the most powerful predictor of quality of life?, the results of stepwise regression indicated that negative emotion alone explains approximately 7.2% of variations of mental dimension of quality of life of mothers of children with hearing deficiency. Results of F test indicated that the component of religious coping was not a good model to predict the physical dimension of quality of life.

In fact, the increase of negative religious coping behaviors (e.g. negative emotions toward God) when faced with situations causing stress is associated with lower quality of life. Negative religious coping is not associated with an established religious behavior and it is based on a single surface, blind belief which is full of contradictions. In this religious coping style, individuals consider God as a source of suffering and punishment. They feel like they are not receiving enough emotional support from God. They see life events as difficulties rather than experiments, which point to unfair and punitive God's wrath. In this coping style, there is no realistic orientation to loss and privation. However, positive religious coping style is a type of secure relationship with God. In this coping style, the individual considers God as a safe haven and secure base and considers disasters as divine tests or an opportunity for spiritual growth. They believe that God will help them solve their problems.

Conclusion

The findings of this study showed that the increase in negative religious coping behaviors (e.g., negative emotions toward God) reduces the quality of life of mothers of children with hearing deficiency. Therefore, increasing knowledge of the importance of early identification of hearing loss in children and the importance of initiating early rehabilitation program and given the fact that main instructors of preschool-age children with hearing deficiencies are their mothers, introducing different religious coping styles and, in particular, introducing negative religious coping and its hazardous effects can be applied as effective strategies to improve mothers' mental health and provide a better quality of life.

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References

1. Michaeli Manee F. The structural relationship between psychological well-being and perceived emotional intelligence, the ability of the negative control and depression in mothers of mentally retarded children in comparison with normal children. Research on Exceptional children. 2009;9(2):103- 20.
2. Fisman S WL. The handicapped child: psychological effects of parental, marital and Sibling relationships. Pervasive Developmental Disorders. 1991;14:199-217.
3. Eisenhower A S BBL, Blacher J. Preschool children with intellectual: isabilityd Syndrome specificity, behavior problems, and maternal well-being. Journal of intellectual disability research. 2005;49:657-71.
4. Herring S GJ, Taffe K, Sweeney D. Eifeld S. Behaviour and emotional problems intoddlers with pervasive developmental disordersand developmental delay: associations with parental mental health and family functioning. Journal of Intellectual Disability Reasearch. 2006;12:874-82.
5. Foroughan M MG, Salimi M, Asad-Malayeri S. The effectiveness of a group counseling program on the mental health of parents of hearing impaired children. Audiol. 2007;15(2):53-60.
6. Kurtzer-White E LD. Families and children with hearing loss: grief and coping. Ment Retard Dev Disabil Res Rev. 2003;9(4):232-5.
7. Ghodrati Mirkoohi M GBB. Symptoms of stress, stressors and coping strategies of parents deaf students. Research on Exceptional Children. 2010;10(2):163-73.
8. Quittner A L GRL, Jackson D N. Chronic parenting stress: Moderating versus mediating effects of social support.

Journal of Personality and Social Psychology. 1990;59(6):1266-78.
9. Jackson C. W TA. Impact of deafness on family life: A review of the literature. Topics in Early Childhood Special Education. 2004;24(1):15-29.
10. Momeni kh SA. Relationship of spirituality, resiliency, and coping strategiest with quality of life in university students. Journal of Behavioral sciences. 2012;6(2):97- 103.
11. Bonomi A E PDL, Bushell D M, Martin M. Validetion of the United State version of the World Health Organization Quality of Life (WHOQOL) instrument. Jornal clin epidemiol 2000;53(1):19-23.
12. Allik H LJO, Smedj H. Health- related quality of life in parents of school-age children with Asperger syndrome or high-functioning autism. Health and Quality of Life Outcomes. 2006;4(1):165-71.
13. Mugno D RL, Genitori V, Mazzone L Impairment of quality of life in parents of children and adolescents with pervasive developmental disorder. Health Quality Life Outcomes. 2007;5:22-30.
14. Ones K YE, Getinkaya B, Caglar N. Assessment of the quality of life of mothers of children with cerebral palsy. Neurorehabilitation neural. 2005;19(3):232-7.
15. Khayatzadeh M. A comparative Study about quality of life in mothers of children with cerebral palsy, mental retardation and mothers of normal children. Daneshvar Medicine Journal of Shahed university. 2009;83(1-11).
16. Burger T SC, Richter B, Eissele S, Erwin L, & Bengel, J. Parental distress: The initial phase of hearing aid and cochlear implant fitting. American Annals of the Deaf. 2005;150(1):5-10.
17. Jackson CW WJ, Turnbull AP. Family Quality of Life following early identification of Deafness. Lang Speech Hear Serv Sch. 2010;41(2):194-205.
18. Hasani vajari K BeH. The role of religious coping and spiritual happiness in the explanation of mental health. Journal of psychology. 2005;9(3):249-60.
19. Shoaa kazemi M. The relationship between religious coping strategies and mental health in Multiple Sclerosis Patient (MS. Journal of Applied Psychology. 2009;1(9):57-66.
20. Carver J. Coping stress and social resources among with unipolar depression. Journal of personality and social psychology. 2002;4:51-5.
21. Lucchetti G LAL, Badan-Neto A M, Peres P T, Peres M F P, Moreira-Almeida A, Gomes C, Koeing H G. Religiousness affect mental health, pain and quality of life in older people in an outpatient rehabilitation setting. J Rehabil Med. 2011;43:316-22.
22. Hills J PJA, Cameron J R, Shot S. Spirituality and distress in palliative care consultation. Journal of Palliative Medicine. 2005;8(4):782-8.
23. Pargament K I KHG, Tarakeshwar N, Hahn J. Religious coping methods as predictors of psychological, physical and spiritual outcomes among medically ill elderly patients: a two-year longitudinal study. Health Psychol. 2004;9(6):713-30.
24. Pearce M J SJL, Prigerson H G. Religious coping among caregivers of terminally ill cancer patients: main effects and psychosocial mediators. J Health Psychol. 2006;11(5):743-59.
25. Tarakeshwar N VPE, Pearce M J, Kasl S V, Prigerson H G. Religious coping is associated with the Quality of Life of patients with advanced cancer. J Palliat Med. 2008;9(3):646-57.
26. Norhayati I AD, Norella Kong T C, Ismail R, Zainah A Z. Pertanika J. & Hum. Social Support and Religious coping strategies in health-related Quality of Life of end-stage renal disease patients. Soc Sci. 2011;19:91 - 7.
27. Aflakseir A CPG. Initial development of iranian religious coping scale. Journal of Muslim Mental Health. 2011;1:44-61.
28. Montazeri A GA VM, et al. The short form health survey (SF-36): translation andvalidation study of the Iranian version Quality of LifeResearch. Quality of LifeResearch. 2005;14:875-82.