

The Relationship Between General Health and Resiliency in Mothers of Primary School-Age Children in Yazd, Iran

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Received 2015 July 08; Revised 2016 January 20; Accepted 2016 January 27.

Abstract

Background: The identification of maternal health status is a fundamental principle for any society, because mothers play an important role in the education of healthy children for the future of a country.

Objectives: The purpose of this study was to assess the relationship between the general health and resiliency of mothers of school-age children in the city of Yazd, Iran.

Patients and Methods: This cross-sectional study was done on 122 mothers with school-age children who referred to Parnian Counseling and Psychological Center in Yazd during 2014. Of these numbers, 59 women had children with learning difficulties who were being treated by a psychologist. Convenient sampling method was used in this study. Data were collected from a demographic information form, general health questionnaire (GHQ), and a resiliency assessment (CD-IRSC). Data were analyzed using SPSS-18 and descriptive and inferential statistics (Pearson correlation coefficient, T-test, and stepwise regression).

Results: The results showed a significant relationship between general health and components of somatic symptoms, anxiety, depression, and social dysfunction with resiliency in mothers of school age children. There was no significant difference between the general health and resiliency among mothers of children with learning difficulties and those without such difficulties ($P > 0.05$). It also became clear that social dysfunction, anxiety, and sleep disorder have the highest ability to predict resiliency among mothers ($P < 0.05$).

Conclusions: Based on our results, we can infer that the greater the mental health of mothers, the greater their ability to cope with life events. So, faced with unpleasant events such as fear and disease, they can show a better response.

Keywords: General Health, Resiliency, Mothers

1. Background

Health, as defined by the World Health Organization, refers to the ability to engage in physical activity and to play one's psychological and social roles. Mental health has been placed amid the general concept of health, and, based on this definition, it refers not just to the absence of disease, disability, or retardation (1, 2). Some psychologists define mental health as having goals in life and making wise efforts to solve social adaptability problems based on scientific and ethical principles (3). Mental health is a subjective assumption that includes emotional health free from anxiety, the ability to establish efficient relationships, and the ability to cope with the demands of a stressful life (4, 5).

Today, most of the tools that are used to measure health status mainly focus on health problems (pain and fatigue), psychological problems (stress and depression), and social problems (marital problems and disabilities associated with social functioning) (6, 7). Accordingly, the last decade has seen a positive psychological approach employed in

the theoretical models that pay attention to studying and understanding these capabilities, strengths, talents, and merits. This new approach is interested in studying the positive aspects, rather than the negative aspects, of mental health and illness (8, 9). Therefore, resiliency is being used as one of the main structures in the psychological approach (6) as a positive process in dealing with bitter and unpleasant experiences (10, 11). In fact, resiliency, or "stress resistance," (12) is a factor that helps people faced with difficulties and stressors to become better adapted to those situations and to protect them from life's problems and mental disorders (13).

Previous studies have shown that abiding individuals have the ability to adapt and withstand the most stressful life situations (11). Religious attitude and hope for the future are known as effective and supportive factors in resiliency (14, 15). A supportive and friendly family environment can also have an important role in enhancing resiliency (14). Rutter (1979) showed in his study that teenagers who have a good relationship with at least one

parent also have an increased resistance to high-risk behaviors as an adolescent (16). Also, Perkins and Jones (2004) identified family support and positive interaction between parents and children as an effective factor in enhancing resilience (15). Other relevant studies show that the outer protective factors, such as efficient schools, a positive atmosphere in the school, relationships with other supportive adults, and extracurricular activities are methods that are supportive for children and youth against high-risk behaviors (17, 18).

2. Objectives

A review of previous studies in Iran showed that few studies have been done on the psychological status of mothers of school-age children, and many questions are still unanswered. Hence, the present study aimed to assess the relationship between general health and the resiliency of mothers of school-age children in Yazd and then to compare it with parents of typical children and parents whose children have learning disabilities, in order to answer the above-mentioned questions.

3. Patients and Methods

This was a cross-sectional study designed to examine the relationship between mental health and resiliency among mothers of school-age children. The sample size of this study included 122 women who referred to Parnian counseling and psychological center in Yazd between April and July 2014. A convenience sampling method was used. Among mothers who referred to the medical center, we chose 59 women who had children with learning disabilities and under treatment by an expert psychologist. This study was registered at the ethics committee of Shahid Sadoughi University of Medical Sciences. All women received an explanation about the research before they were enrolled in the study, and written informed consents were obtained. Finally, subjects were asked to participate in the research and to complete the psychological questionnaires. The questionnaires are as below:

3.1. Demographic Questionnaire

This is a researcher-made questionnaire to collect demographic information such as age, gender, occupation, education, and so on.

3.2. General Health Questionnaire (GHQ)

The questionnaire was devised by Goldberg and Hiller in 1979 and is known as a useful tool worldwide. The questionnaire contains 28 items and four subscales (somatic

symptoms, anxiety and sleep disorders, social dysfunction, and depression symptoms) and uses a total score as an indicator of the mental health of the individual and aids in diagnosis. Each examinee chooses one of the options (better than usual, almost as usual, worse than usual, much worse than usual) to determine the extent of his mental health. At the end, each individual's score is graded from 0 to 3, and the rate of each disorder and overall Score of Mental Health is calculated. A higher score means better health and mental condition. This questionnaire was standardized by Ebrahimi et al. in 2007 and reports on its reliability coefficient by means of Cronbach's alpha as 0.97 (19). Also, for the present study, a Cronbach's alpha coefficient of 0.87 was obtained.

3.3. Resiliency Questionnaire (CD-IRSC)

This questionnaire was created by Conner and Davidson in 2003 to measure a person's resiliency in the face of problems. The test has 25 questions and is graded using a Likert scale of zero (completely false) to five (very good). The test scores range from 0 to 100, so that the higher the total score, the greater the amount of resiliency or resistance to stress. Mohammadi normalized this questionnaire in 2006 and reported its reliability coefficient by means of Cronbach's alpha as 0.89 (20). In the present study, Cronbach's alpha coefficient was obtained to be 0.93.

Finally, SPSS-18, descriptive and inferential statistics (T-test, Pearson correlation coefficient, stepwise regression) were used to analyze the data.

4. Results

In this study, 122 mothers of school-aged children participated; they ranged in age from 26 to 50 years. The mean age and standard deviation of the participants was 34.3 ± 5.23 years. More than half, 51.6%, were mothers of typical children and 48.4% were mothers of children with learning disabilities. In total 54.9% of mothers were housewives, 18% teachers, 14.8% self-employed, and 12.3% were employees. Those with a high school diploma comprised 42.6% of participants, 41% Guidance school, and 16.4% had only a primary school education.

The mean results show that the amount of resiliency in mothers of school-aged children ($M = 71.4 \pm 12.72$) is about moderate to high. Also, the total mean of general health scores ($M = 23.48 \pm 12.04$) show that the rates of physical and mental disorders among parents were mild, and they were in good mental health. An independent T-test was used to compare the rate of general health and resiliency among mothers of typical children and mothers of children with learning disabilities. The results showed

Table 1. The Mean Scores of Resiliency, Mental Health and Their Subscales in Parents of Children (N = 122)

Variable/Group	Mean	Std. Deviation	t	P Value
Resiliency			0.814	0.418
Non- LD	71.56	11.88		
LD	69.62	14.66		
Somatic symptoms			1.45	0.147
Non- LD	7.07	4.26		
LD	6.06	3.37		
Anxiety and sleep disorders			-0.842	0.401
Non- LD	6.44	4.6		
LD	7.1	4.4		
Social dysfunction			0.634	0.528
Non- LD	6.47	3.37		
LD	6.1	3.1		
Depression symptoms			-1.208	0.229
Non- LD	2.44	3.54		
LD	3.25	3.85		
General health			-0.51	0.959
Non- LD	22.44	12.93		
LD	22.55	11.84		

that there is no significant difference between the means of general health and resiliency among mothers of typical children and mothers of children with learning disabilities ($P > 0.05$) (Table 1).

Table 2 shows the relationship between the main variables in parents of school children using Pearson Correlation Coefficient.

Table 2. Pearson Correlation Coefficient Between General Health and Resiliency

Variables	Resiliency	
	r	P Value
General health	-0.217	0.016 ^a
Somatic symptoms	-0.334	0.001 ^b
Anxiety and sleep disorders	-0.310	0.001 ^b
Social dysfunction	-0.382	0.001 ^b
Depression symptoms	-0.349	0.001 ^b

^a0.05 significant level.

^b0.01 significant level.

The results of Table 2 show that there is a significant negative relationship between mental health and resiliency ($r = -0.217$, $P = 0.016$), somatic symptoms and resiliency ($r = -0.334$, $P = 0.001$), anxiety/sleep disorders and

resiliency ($r = -0.310$, $P = 0.001$), social dysfunction and resiliency ($r = -0.382$, $P = 0.001$), and depression symptoms and resiliency ($r = -0.349$, $P = 0.001$). Therefore, the higher the level of mental health in mothers of schoolchildren and the fewer physical symptoms they report, the greater their resiliency against life events. In the following, a stepwise multiple regression analysis was used to determine the mental health of each variable with its components in resiliency variation. The results are presented in Table 3.

The contents of Table 3 show that two components in two steps have multiple correlation with resiliency in which social dysfunction, with a determination coefficient of 11%, is able to predict resiliency based on the importance of predictor variables in stepwise multiple regression analysis.

In the second step, the determination coefficient is up to 15% by adding anxiety and insomnia to social dysfunction, and it can be said that anxiety and insomnia disorders (4%) can predict resiliency. According to Table 4, we can say that 15% of resiliency can be predicted by social dysfunction, anxiety, and insomnia regression; variance analysis confirmed the reliability of regression in mental predicting (Table 4).

In Table 5, a stepwise multiple regression analysis has included social dysfunction, anxiety, and insomnia in the

Table 3. Summary of Stepwise Regression for Criteria Variables on the Basis of Predictor Variables

Model	Variables	R	R Square	Adjusted R Square	Std.
1	Social dysfunction	0.344	0.118	0.111	12.52
2	Anxiety and sleep disorders	0.392	0.154	0.140	12.31

Table 4. Summary of ANOVA Using a Stepwise Regression Analysis

Model	Sum of Squares	df	Mean Square	F	P Value
1				16.592	< 0.001
Regression	2381.056	1	2381.056		
Residual	17220.452	120	143.504		
Total	19601.508	121			
2				11.445	< 0.001
Regression	3162.102	2	1581.051		
Residual	16439.406	119	138.146		
Total	19601.508	121			

regression equation for predicting resiliency, which means there is a negative significant relationship between social dysfunction ($\beta = -0.34$, $P < 0.001$) and resiliency. There is also a negative significant relationship between anxiety and insomnia ($\beta = -0.22$) with resiliency. This result shows that social dysfunction reduction predicts low levels of resiliency in mothers (Table 5).

5. Discussion

This study aimed to assess the relationship between general health and the resiliency of mothers of school-age children in Iran. The results showed a total mean of resiliency of 71.4 ± 12.72 in mothers of school children, which is moderate to high. This means that the rate of maternal tolerance against the stresses of life is good. Further, the total obtained mean of their general health scores show that the rates of somatic symptoms, anxiety, social dysfunction, and depression symptoms are low and they have good mental health. Aghayusefi and Bazyari Meymand (2013) showed in their study that high resiliency plays a protective role against life's harsh conditions, so high resiliency can reduce the negative effects of stressful factors on an individual's health (21).

Other results obtained in this study show that there is no significant difference between mental health and resiliency among mothers of typical children and mothers of children with learning disabilities. Although it is expected that the psychological status of parents of typical children should be better than among parents of children

with learning disabilities, no research has been done in this area to which we can compare our findings. These results could be important for medical centers, as occupational therapists can use the supportive and promoter roles of mothers to improve children's conditions, in addition to paying attention to the treatment of the child's learning disability.

In this regard, our results showed a negative significant relationship between mental health and somatic symptoms, anxiety and sleep disorders, depression symptoms, and social dysfunction with resiliency. This means that the lower the levels of mental disorders in mothers and the greater their mental health, the more resilient they are against the stresses of life. These results are in line with studies by Poursardar et al. (7) and Besharat (22), who found a positive significant relationship between mental health and resiliency. Rahimian Boogar and Asgarnejad Farid (2008) found that those who have better mental health also have greater resiliency against difficulties (23). Wolff (1995) believes that resilient people have several positive features, such as the ability to solve problems, exercise self-control, sociability and being purposeful, all of which promote their mental health (24).

Our regression analysis showed that social dysfunction and anxiety and sleep disorders respectively have, the ability to predict resiliency. This means that the lower the level of social dysfunction and anxiety and sleep disorders among mothers, the higher their level of resiliency. These results are in line with results of Hamid and colleagues (14). Poursardar et al. (2012) showed that life satisfaction and

Table 5. Summary of Coefficients in a Stepwise Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	T	P Value
	B	Std. Error	Beta		
1					
(Constant)	81.635	2.735	-0.349	29.853	< 0.001
Social dysfunction	-1.405	0.345		-4.073	< 0.001
2					
(Constant)	82.972	2.741		30.268	< 0.001
Social dysfunction	-1.004	.378	-0.249	-2.656	< 0.009
Anxiety and sleep disorder	-.628	.264	-0.223	-2.378	< 0.019

mental health have the ability to predict resiliency (7).

Generally, our results show that increasing a mother's mental health can be a good way for her to deal with unpleasant and stressful life events, such as illness, fear, chaos, and so on. Higher mental health levels of mothers can increase their tolerance strength. As a result, the rate of women's future mental reversibility state will increase. In this regard, researchers have tried to report results without error and bias, and with respect to ethical principles. However, this study does have some limitations, such as the few number of parents having children with learning disabilities and the paucity of relevant studies in Iran and around the world. Further studies on the psychological status of parents with sick and healthy children are recommended as areas for future research. It is also necessary to pay more attention to factors such as demographic variables, gender, education level, economic status, income, and the welfare of parents and children.

Acknowledgments

This research was done in collaboration with the department of education center and Parnian psychological and counseling center of Yazd. The authors of the study wish to express their appreciation to all related authorities and those who assisted us in collecting the data.

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