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Qualitative and quantitative Analysis of the Parenting Styles, Coping Strategies and Perceived Stress in Mothers of Children who have undergone Cardiac Interventions

Naumoska Ljubica [a*], Dojcinovski Ilija [b], Ristovska Frosina [c] Sait Saiti [d], Suzana T.Paunovska [e], Zan Mitrev [f]

[abc] Department for Psychology and psychotherapy, Special Hospital for Cardiac Diseases "Filip II", Skopje, Macedonia
[de] Red Cross of Skopje, Macedonia
[f] Department for cardio-thoracic surgery, Special Hospital for Cardiac Diseases "Filip II", Skopje, Macedonia

Abstract

Exploring the parenting styles, coping strategies and perceived stress in parents of children who have undergone cardiac intervention are challenging issues because they affect the whole family dynamics. Ten mothers of children who have undergone cardiac intervention and ten mothers of healthy children, aged 5 to 14 were administered three questionnaires: Parenting styles Questionnaire, Cope and Perceived stress Questionnaire. The testing was conducted at the final day of their five-day summer camp in June 2011.

Exploration of psychosocial characteristics of parents living with the diagnosis of cardiac disease in their child is crucial for the entire team of those providing healthcare. Adequate medical as well as psychological diagnosis can provide adequate psychotherapeutic interventions which can have multi-faceted benefits both for the parents and children in the process of coping.

Keywords: parenting styles, coping, perceived stress, congenital heart diseases, psychotherapeutic care*;*

1. Introduction

According to Pediatrics in 2006 congenital heart disease (further in the text CHD) are defined as a complex disease of the cardiovascular system that is a result of the dysfunctional embryology of the heart structures, in various period of the gestation, which leads to system organism problems. Around 1% of the babies are born with CHD *and* 75% of them have necessity for surgical intervention. The general incidence is 7 in 1000 birth. The etiology is various: diabetes in the mother, or mothers treated with medication, great environmental contamination, chromosome abnormalities, genetically malformations *and* syndromes *etc.* Congenital heart disease *is been treated only in* the Special Hospital FILIP VTORI. From 2000 until 1.06.2010 259 patients with congenital heart diseases have been treated.

* **Naumoska Ljubica** Tel.: +389 02 3091 861 Tel.: +389 70 344 157
E-mail address: Ljubica.Naumoska@cardiosurgery.com.mk

1.1. Family as a whole system

Congenital heart diseases diagnosed in childhood presents a distress for the child, as well as for the family system. Contemporary psychological theories tend to see human and events as a whole. This refers to family system as well. We see family not only as an amount of family members but as a specific entity with specific characteristics and dynamics. This dynamic is disturbed after the diagnosis is set.

From the moment when diagnose is set, parents of the child are pushed into a world which seeks from them dramatic adaptation on expectancies, gathering information and making decision for completely new and unknown area for them. Every single member of the family (mother, father, siblings and other relatives) is being forced to make new adaptation on the complex challenges that the chronic disease brings with it. Every single of them will choose its own model of adaptation according to his/her personality (1). This process of reacting towards the diagnosis and managing it is complex and multisided (2, 3, 4, 5, 6 and 7).

Poor adaptation can manifest itself trough: overstress, psychiatric disorder, negative impact on child life and/or his family and negative impact in the overall adaptation of the sick child (2, 4, 9, 10, 11 and 12).Nevertheless, majority of the families show incredible resiliency and succeed in adaptation to the challenges that come out of the new situation (7, 8).

1.2. Coping strategies

Parents experience wide specter of emotions and resistances in the adaptation process. The most common are: denial, disbelieve, feeling of helplessness, guilt, fear and suffer. They result from child's condition, the possibility of death and uncertainty for family future (13, 14). This whole psychological baggage may lead to development of different forms of psychological problems and disorders, most commonly PTSD. Although there is a small number of studies' dialing with this phenomena, it is estimated that near 2/5 of parents with children that had heart transplantation, developed mild to severe symptoms of PTSD, approximately two and a half years after the transplantation (15).

In order to cope with the diagnosis, parents may react in different ways toward their child. For example they can make greater distance from the child, protecting themselves from pain and fear that they may lose it (16). This further reflects on the process of child-parent attachment. Studies have shown that mothers of children with CHD compared with parents of healthy children, show less positive emotions and engagement in interaction, before and after 6 months from corrective surgery (17). They also describe their children as more sensitive, introvert and that they react more intensively on stimulus (18).

The theory that explores bio-psychological aspects at children with chronically diseases has defined this phenomenon vulnerable child syndrome. Vulnerable child syndrome has been defined as a reaction characterized with dysfunction in child's psychosocial development as a result of parental standpoint while scared for premature death of their child which leads to behavioral and social problems in the child's development (21). Most certainly at the end this affects the whole psychosocial development of the child (21). One more attitude that affects negatively on child's physical, emotional and social development is the overprotective relation, as well as parental reduced expectation from children with a health problem (21).

1.3. Parenting style

It is obvious that the parental attitude influences child's ontogenetically development. Three parenting stiles have been described in the literature: authoritarian, authoritative and permissive (22). Parenting styles are less "clear" but parents can have a predominant parenting stile. Some of the parenting stiles stimulate child's development and some of them

suppress various aspects of the child's development. In this sense we tried to identify dominant parenting stile at mothers with children that have undergone cardiac intervention or operation.

2. Subjects and methods

Ten mothers of children who have undergone cardiac intervention (6 of them have heart intervention and 4 have open heart surgeon), aged 5 to 14, and ten mothers of healthy children were administered three questionnaires: Parenting styles Questionnaire, Cope and Perceived stress Questionnaire. The testing was conducted at the final day of their five-day summer camp in June 2011, which was/is a collaborative project between the Special hospital for surgical disease "FILIP VTORI" and the Red Cross of city Skopje, devoted to psychological support for children with CHD and their parents.

We used independent samples t-test for the statistical analysis of three relevant questioners that were included. Parenting styles Questionnaire consists of three scales: authoritarian, authoritative and permissive parenting style (22). Higher score on each scale indicates more practiced parenting style. Cope inventory determines fifteen coping strategies (23). Higher score on each scale indicates more practiced coping strategies. Lower score on each scale indicates less practiced coping strategies. Perceived stress Questionnaire measures the way one person manifests the perceived stress, thro seven clinical scales and one total score (24).

3. Results

Statistical analysis shows that when compared to healthy mother, mother of children with CHD were statistical significant more concerned (Figure 1).

Scales	Mothers	Mean (SD)	t	Sig (2-tailed)
Perceived stress				
Anxiety	Healthy child	2,18 (,58)	-1,238	,238
	Child with CHD	2,5 (,35)		
Burden	Healthy child	3,13 (,55)	,222	,828
	Child with CHD	3,25 (,54		
Irritability	Healthy child	2,13 (1,03)	-1,589	,148
	Child with CHD	2,92 (,35)		
Dissatisfaction	Healthy child	2,38 (,36)	-1,512	,154
	Child with CHD	2,66 (,38)		
Fatigue	Healthy child	2,59 (,61)	-1,371	,194
	Child with CHD	2,96 (,39)		
Concern	Healthy child	2,02 (,54)	-2,309	,038*
	Child with CHD	2,71 (,61)		
Tension	Healthy child	2,1 (,75)	-2,145	,056
	Child with CHD	2,75 (,38)		
Summa	Healthy child	,47 (15)	-1,953	,082
	Child with CHD	,58 (0,58)		

*significant p<0, 05

Figure 1. Independent Sample T Test for perceived stress

Statistical analysis shows that when compared to healthy mother, mother of children with CHD use significantly more denial as coping strategy (Figure 2).

Scales	Mothers	Mean (SD)	t	Sig (2-tailed)
Cope				
Positive reinterpretation and growth	Healthy child	3,5 (,48)	1,315	,215
	Child with CHD	3,21 (,34)		
Mental disengagement	Healthy child	2,54 (,48)	1,444	,176
	Child with CHD	2,07 (,66)		
Focus on and venting of emotions	Healthy child	3,2 (,81)	-,825	,439
	Child with CHD	3,5 (,32)		
Use of instrumental social support	Healthy child	3,29 (,76)	,204	,842
	Child with CHD	3,21 (,60)		
Active coping	Healthy child	3,33 (,44)	,609	,555
	Child with CHD	3,17 (,47)		
Denial	Healthy child	1,67 (,44)	-2,657	,022*
	Child with CHD	2,42 (,57)		
Religious coping	Healthy child	2,37 (,86)	1,907	,258
	Child with CHD	3,17 (,66)		
Humor	Healthy child	2,29 (,71)	1,194	,258
	Child with CHD	1,82 (,70)		
Behavior disengagement	Healthy child	2,00 (,73)	-,678	,513
	Child with CHD	2,28 (,71)		
Restraint	Healthy child	2,67 (,75)	-,915	,380
	Child with CHD	2,96 (,39)		
Use of emotional social support	Healthy child	3,29 (,79)	,513	,606
	Child with CHD	3,11 (,43)		
Substance use	Healthy child	1,17 (,30)	-,517	,616
	Child with CHD	1,28 (,49)		
Acceptance	Healthy child	3,33 (,41)	1,284	,225
	Child with CHD	2,75 (1, 04)		
Suppression of competing activities	Healthy child	2,79 (,40)	-,709	,493
	Child with CHD	2,96 (,47)		
Planning	Healthy child	3,58 (,46)	,508	,621
	Child with CHD	3,43 (,61)		

*significant p<0, 05

Figure 2. Independent Sample T Test for coping strategies

Both groups of mothers are similar in authoritative and permissive style, but mothers of children with cardiac interventions significantly practice more the authoritarian parenting style compared to the control group (Figure 3).

Scales	Mothers	Mean (SD)	t	Sig (2-tailed)
Parenting style				
Authoritarian	Healthy child	2,17 (,071)	-,616	,549*
	Child with CHD	3,61 (,49)		
Authoritative	Healthy child	5,36 (,44)	-2,763	,017
	Child with CHD	5,5 (,43)		
Permissive	Healthy child	2,51 (,64)	-1,179	,261
	Child with CHD	2,92 (,67)		

*significant p<0, 05

Figure 3. Independent Sample T Test for parenting style

4. Discussion and Conclusion

Some analyses of parenting styles among parents of children with CHD show that they tend to lower expectations (19, 20) and insist less on child's discipline (19). But, they show greater attention over the children and tend to normalize children's behavior in everyday life (19). Despite this insight about the influence of CHD over parenting styles, studies have shown that mothers of healthy and children with CHD have similar results on the measurements for parenting and children behavior and monitored interaction (20).

In our research mothers of children with CHD statistically significant practice more the authoritarian parenting stile. This style known as "borders without freedom" with typical need for absolute control of the parent: bad behavior has been punished and love and rewards are purely given. Parental influence is dominant in child's decision, they actually tell children how, where and what to do. In this way they do not support children's aspect of responsibility and suppress their aspect of choosing (only in developmental sense of making choices) since they fear from parental critics. In theory children of parent like this can become more susceptible, introvert, withdrawn, unhappy, arrogant, non ambition and rebellion (20). From a psychotherapeutically point of view counseling and psychotherapeutic work with them on the topic of raising awareness about their parenting style is necessary since children whose parent expects greater results and actively is involved in family activities and obligations learn to be goal oriented. They are pleased to be responsible and successful (19,20). They are happy, self-confident and better control themselves. They are collaborative and ambitious and show less deviant behavior (19, 20).

Since our group consists from only 10 participants we added qualitative analysis to the results. On behavioral level mothers showed permissive parenting stile (namely they allowed to children everything when they want, what they want and how they want it to be done). From other side the verbal messages that mothers used to send to their children were colored with aggressive, non tolerable and mostly disqualifying content. This was a contradictory situation since children received messages with double meaning (one on behavioral and one on verbal level) which is known to create and intra and inter personal conflict. This was not measured, but opens possibilities for further research.

Concerning cope strategy, mothers of children with CHD showed higher score on the following coping strategies: planning, focus on and venting on emotions. They showed lowest score on humor meaning this was the less used coping strategy. When compared with mothers of healthy children, mothers of children with CHD used significantly more the *denial* as coping strategy. Denial was present also during the five-day summer camp, on behavioral and verbal level. Namely, our experience in work with these parents was that they showed resistance for attendance on the psychotherapeutic group work (although the group work was formerly announced). They disputed psychological help and counseling, but it was interesting that this reduced by the end of the camp. Further research can give greater insight in their coping strategies as well as direction for psychotherapeutically interventions.

At the end we wanted to measure how they perceived stress and if it differs from perceived stress at mothers of healthy children. According the statistics, mothers of children with CHD showed significantly higher score on "concern" when compared to mothers of healthy children. This result is expected because the health condition of the child requires it. It means high mobilization of resources, taking responsibility for actions, uncertainty of the treatment outcome etc. From a psychotherapeutic point of view what is important is that these parent, even when the major health problem has been solved (ex. the heart operation is successful, or intervention has been completed and the child is in good health) they still stayed in psychological state of concern. What can be a follow up as a psychotherapeutic intervention is working on closure of one process that has started years ago, when the child was diagnosed and then working on acceptance on the new reality with a child that had undergone cardiac intervention and now is a child in good health.

Awareness of the potential psycho-social burdens for families (parents) living with the diagnosis of cardiac disease in a child is critical for the entire team of those providing healthcare. Further exploration of psychosocial characteristics

of parents can lead to adequate medical as well as psychological and adequate psychotherapeutic interventions. This can have multi-faceted benefits both for the parents and children in the process of coping.

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