The characteristics of family functioning with mentally ill children and adolescents

Karakteristike funkcionisanja porodica sa mentalno obolelom decom i adolescentima

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Abstract

Background/Aim. The family functioning and characteristics are the major risk factors in the genesis and persistence of mental disorders in children. The aim of this study was to evaluate the characteristics of functioning of family with mentally ill children and adolescents. Methods. This study explored 47 families with a child/adolescent suffering from mental disorders and 47 families of age matched healthy children/adolescents. The socio-demographic questionnaire, Social Adaptation Self-evaluation scale (SASS) and Family Adaptability and Cohesion Evaluation Scale (FACES III) (Olson, 1983) were completed by parents. Results. For all three FACES III dimensions multivariate analysis of variance (MANOVA) showed significant differences between groups (Wilks $\lambda = .887$; $F = 3.839$; df = 3; $p = 0.012$). Univariate analysis results showed significant differences for cohesiveness $F = 6.99$ $p = 0.001$ and adaptability $F = 10.07$ $p = 0.001$. The analysis of the social adaptation (SASS) assessment showed that the mean score for clinical vs. non-clinical group was 39.66 ± 6.82 vs. 38.06 ± 8.44 without significant difference between groups ($p = 0.32$). The families of mentally ill children showed frequently lower socioeconomic status and education level, higher number of children per family, and broken home. Conclusion. The results suggested that cohesiveness and adaptability were significantly more prominent among families with mentally ill children, but adaptation was similar to families with healthy children. It would be useful to evaluate adaptability, cohesiveness and adaptation of primary families when planning prevention and rehabilitation of mentally ill children and adolescent.

Key words: child; adolescent; mental disorders; parents; family.

Apstrakt

Uvod/Gilj. Prethodna istraživanja su ukazala na značaj osobina i funkcionisanja porodice kao važnih faktora rizika u nastanku i održavanju mentalnih poremećaja kod dece. Gilj ovog istraživanja je bila procena funkcionisanja porodica sa mentalno obolelom decom i adolescentima. Metode. Studijom je obuhvaćeno 47 porodica sa mentalno obolelom detetom/adolescentom koje su bile porodice sa 47 porodica sa zdravom decom i adolescentima. Roditelji su popunjavali Sociodemografski upitnik, Skalu socijalne adaptacije (The Social Adaptation Self-evaluation scale – SASS) i Skalu evaluacije porodične prilagodljivosti i kohezije (Family Adaptability and Cohesion Evaluation Scale – FACES III); Olson, 1983). Rezultati. Za sve tri dimenzije na FACES III skali multivarijantna analiza varijanse (MANOVA) je pokazala značajnu razliku između grupa (Wilks $\lambda = .887$; $F = 3.839$; $df = 3$; $p = 0.012$). Analiza varijanse (ANOVA) je pokazala da ta značajna razlika postoji za kohezivnost ($F = 6.99$ $p = 0.001$) i adaptibilnost ($F = 10.07$; $p = 0.001$. SASS analiza socijalne adaptacije je pokazala viši skor za kliničku vs. nekliničku grupu (39,66 ± 6,82 vs. 38,06 ± 8,44), bez značajne razlike između njih ($p = 0.32$). Porodice sa mentalno obolelim detetom/adolescentom češće imaju niži socioekonomski status, nezaposlenost roditelja, veći broj dece u porodici, i porodičnu separaciju (razvod). Zaključak. Rezultati su ukazali da su kohezivnost i adaptabilnost značajno uočljivi u porodicama sa mentalno obolelom decom, ali da je socijalna adaptacija slična porodicama sa zdravom decom. Bilo bi korisno da se pri planiranju prevencije i rehabilitacije dece/adolescenta sa mentalnim oboljenjem procene kohezivnost i adaptabilnost primarnih porodica.

Ključne reći: deca; adolescenti; mentalni poremećaji; roditelji; porodica.

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Introduction

The functional family manages to adjust itself to changes and reorganizes while retaining its own identity and structure. The demand for changes within the family may come from the social surroundings (life events, sociocultural context) or from the family itself, that is, from the family members’ needs for individual development in different stages of the family life cycle 1, 2. Parental acceptance and rejection has a dramatic effect, especially when observed by the individual, on children’s personality and behavior as well as on the personality of an adult who considers himself to have been “a rejected child” 3. Researches and clinical records support this supposition that rejection can interfere with a wide range of psychiatric illnesses and behavioral disorders including neurosis, schizophrenia, delinquency, psychophysical illnesses such as allergies, school problems, stammering and body dismorphic disorder 4. A specific and particular form of parental care and communication with a child can be monitored over several generations. It happens that the abused children abuse their own children more often later in life 5. There are also another factors that influence a child’s behavior such as: personal characteristics of parents, marital quarrels, and particular ways of upbringing 6. These factors form the basis for a complex process of growing-up and they have an inevitable impact on child’s behavior.

Researches conducted on families at the territory of the Republic of Serbia indicate changes in family structure and functionality which are connected with broader social development and a process of transition. Apart from the changes in family patterns (single parent families emerging after divorce, casualties of war, and desire to be a sole parent), socioeconomic transition is also in connection with a reduced number of children per family, higher incidence of divorce, delay in getting married, but also the return of multi-generational family household 7–9. According to the studies there has been a shift from a traditional family to an unbalanced family system and chaotic relations 10–12. The importance of associations between characteristics of mentally ill children and their family was described in many studies 13–15.

The aim of the present study was to evaluate the characteristics of functioning family with mentally ill children and adolescents.

Participants

The cross-sectional study was conducted in the Centre for Child and Adolescence Psychiatry at the Institute of Psychiatry in Clinical Centre of Vojvodina in Novi Sad and in health centers in Novi Sad and Bačka Palanka, from February 2014. to March 2015. In the clinical group the one parent from each family with a mentally ill child were consecutively recruited during regular control medical examinations of children. The 53 parents were enrolled, but 47 completed the study. The control group consisted of 47 parents of matched healthy children in health centers in Novi Sad and Bačka Palanka chosen during regular medical examinations.

The inclusion criteria were diagnosed mental illness of the children according to diagnostic criteria of the International Classification of Diseases, tenth revision (ICD-10) and parents age from 25 to 65 years. The criteria for exclusion of parents from the study were presence of neurological disorders; serious heart disease (fresh myocardial infarction), serious endocrine disorders, malignancies, substance abuse in previous 12 months and mental retardation.

The inclusion of parents was performed successively, according to inclusion and exclusion criteria, starting from the first day of testing onwards, up to the date when the total number of respondents was reached, in accordance with previous calculation of sample size.

Prior to entering the study, all participants signed informed consent and the survey was approved by the Ethics Committee of Clinical Center of Vojvodina.

Instruments

General questionnaire was designed for this study to collect the basic socio-demographic data obtained from the participants such as: gender, age, educational status, marital status, employment and material status of the family. Each questionnaire was completed by one parent.

Social Adaptation and Self Evaluation Scale (SASS) 16 consisting of 21 questions developed to detect the presumptive differences of social interactions, global social attitude, motivation and behavior. SASS focuses on a subject’s self-perception and motivation focused on action rather than objective performance. It provides an understanding of an individual’s level of satisfaction with his/her social situation. It evaluates the current situation, enjoying the activities of work, occupation and hobby, quality of leisure time, behavior in the family, the quality of family relationships, sociability, active social behavior, quality of relationships with people, evaluation of relations with the external environment, social attractiveness, social considerations, social embeddings, curiosity, intellectual preoccupations, difficulties in communication, a sense of rejection, vanity, the difficulty in managing income and environmental management. Twenty items are summarized for the total possible score of 60. In evaluation of overall results a higher score indicates better functioning 17.

Family Adaptation and Cohesion Scales (FACES III) is a questionnaire that assesses family adaptability and cohesion. 14 It investigates family dynamics and consists of 10 cohesion items and 10 adaptability items. The respondents indicate how frequently the described behavior occurred in his/her family on a Likert scale from 1 (almost never) to 5 (almost always). The total scores of adaptability and cohesion ranged from 10 points to 50 points, respectively.

Family cohesion assesses the degree of closeness or distance among family members on the basis of four stages: remote, separated, connected and networked. Adaptability was evaluated on four levels: family rigidity, structured, flexible and chaotic. The questionnaire consists of 20 questions in the form of a five-point scale; the sum of points on the uneven responses represent cohesiveness, and the sum of the even
numbers adaptability of the family. The Beavers system model, the importance of family competence, capability of the family (interaction units) to accomplish the tasks was set before. Competence is measured by Beavers interaction scale for competence (Beavers Interactional Competence Scale). Within circumcision model of marital and family systems there are three dimensions: family cohesion (emotional ties, internal boundaries, coalition, time, space, friends, decision making, interest and recreation), flexibility (leadership, control, discipline, arranging, styles, roles, relations, rules) and communication (listening skills, interview skills, inclusion, transparency, the ability to maintain the continuity of respect and regard for the caller) important to assess the functioning. Within Circumplex model, a high (chaotic) and very low (rigid) level of flexibility become problems for the individual and the relationship, if long lasting. Relations with the average score (structured and flexible) achieve stability and the possibility of applying a functional way.

**Statistics**

The descriptive statistics was applied with the absolute and relative numbers; measures of central tendency (mean, median) and measures of dispersion (standard deviation, variation interval) From parametric and nonparametric tests analysis of variance of repeated measurements, the Friedman’s test and the Wilcoxon’s test were used, respectively. The Pearson’s and Spearman’s tests were used for testing correlations, while in certain situations for testing connectivity dynamics of the two parameters linear mix model was applied. All data were processed in SPSS 20.0 software package. The differences with \( p < 0.05 \) were considered significant.

**Results**

**Sociodemografic characteristics**

Among parents, more mothers (73.4%), and more children and adolescents of male gender were registrated (58.5% vs. 41.5%). Age of parents ranged from 26–57 years, and children from 4 to 17 years. There were no statistically significant differences between the clinical and the control group in the level of parental education. In the clinical group significantly more parents were unemployed.

Regarding marital status in the control group significantly greater number of married subjects was observed (\( p \leq 0.05 \)), while the percentage of those in common-law marriage and divorced ones was significantly lower.

Statistically significant difference between the clinical and non-clinical (control) group was observed regarding their financial status (\( p = 0.05 \)) in terms of higher prevalence of families with below-average financial status in the clinical group.

There is a statistically significant difference (\( p \leq 0.05 \)) between the clinical and the non-clinical group regarding the number of children in a family, with a greater number of children in clinical families than in non-clinical ones.

The most frequent mental disorders among children were behavior disorders (28%), followed by emotional disorders (approximately 19%) and psychotic disorders (15%) in the clinical group.

The mean scores for the clinical vs. non-clinical group were assessed regarding cohesiveness (42.02 vs. 35.17) and adaptability (38.79 vs. 31.23). Univariate analysis results showed significant differences for cohesiveness \( F = 6.99\ p = 0.001 \) and adaptability \( F = 10.07\ p = 0.001 \).

For all three FACES III dimensions MANOVA was performed and significant differences between groups were registered: Wilks \( \lambda = 0.887; F = 3.839; df = 3; p = 0.012 \) (Figure 1).

The analysis of the social adaption assessment (SASS) showed that the mean score and standard deviation (SD) for clinical vs. non-clinical group was 39.66 ± 6.828 vs. 38.06 ± 8.445, respectively, and there was no statistically significant difference between groups (\( t = 1.007\ df = 92 ; p = 0.32 \)) (Figure 2).

**Discussion**

In this study, the sociodemografic characteristics and influence of children’s mental disorders on family functioning, primarily on adaptability and cohesion were investigated.

The results showed that there were significantly less frequent two-parents families and a common-law marriage and separated couples were more frequent in the families with mentally ill children compared to families with health children. During last decades the proportion of children in two-parent families decreased and high divorce rate in population in general was recorded, so overall trends suggest that more than one quarter of all children live with a single parent, usually with their mother. In our study there were more mothers than fathers (three quarter vs. one quarter of participants) and male children were more frequent. It is in concordance with earlier reports in which a comparable impact of mother-child attachments has been shown.

There were no significant differences between the clinical and the control group in the parents’ education level. However, in the clinical group below average financial level was more prevalent and more parents were unemployed. It was in concordance with previous research in which family risk factors for children psychopathology included low socioeconomic status, large family size and divorce. Also, the greater number of children (three or more) per family was more frequent in the clinical group. The changes in family structure and children's health are strongly related to family income and the financial resources, but parenting may moderate risk effects. In families with more children, parents are more burdened, which may be a risk factor for development of a child’s behavior disorder and a large number of children is more frequently connected with lower socio-economic status. A low income could have a negative effect on parental skills as well as on a child, which creates the potential for family violence, neglect and abuse. A key component of the experience of early childhood poverty may be of a high level of cumulative risk exposure, especially consequential for children’s psychological well-being.
Fig. 1 – The differences between groups regarding dimensions on the Family Adaptation and Cohesion Scale (FACES III)

Group 1 – clinical group (families with mentally ill children)
Group 2 – non-clinical group (families with healthy children)

Fig. 2 – The differences between groups regarding Social Adaptation and Self Evaluation Scale (SASS)

Group 1 – clinical group (families with mentally ill children)
Group 2 – non-clinical group (families with healthy children)
SE – standard error; SD – standard deviation.
In this paper the most frequent mental disorders among children in the clinical group were behavior disorders (28%), followed by emotional disorders (approximately 19%) and psychotic disorders (15%). However, the results from prior studies showed similar characteristics of the family over a broad range of child psychopathologies. So, conduct problems, aggression symptoms and depression were uniquely associated with specific family environments marked by less cohesiveness, greater conflict and intellectual/cultural pursuits.

An unfavorable family atmosphere, unstable family relationships and parental vulnerability to stress are recognised as risk factors for development of mental disorders in children. Studies in this area indicate that beyond type of disability, child's self-regulatory processes and family climate, especially mother-child interaction were key predictors of change in both parent well-being and child development. There are suggestions that for an individual personality development parental influence is crucial and a good parent-child relationship may promote children's behavioural and emotional resilience to multiple environmental risk exposure.

There was no difference between the clinical and the non-clinical group regarding parental social adaption. This was unexpected if we take into account that there was a high incidence of unemployment, divorce, lower socioeconomic status as well as that these parents take care of a child with a mental disorder. This partly could explained by parents' compensatory mechanisms and skillfulness in struggling with a child's mental disorder and partly by the symbiotic relationship of parents (especially mothers) with ill child, which comes as a consequence.

The measures of family functioning showed difference between the clinical and the non-clinical group. The cohesiveness and adaptability significantly were higher in the clinical group. compared with the non-clinical group. It might be unexpected, because, according to the Beavers systems model, the families where a certain mental illness emerge, are less adaptable, more rigid, while this survey showed the opposite situation. In many previous studies, it was reported that adolescent problem behaviors are related to family functioning. The family cohesion has significant impact on psychiatric symptoms, but the stronger associations for adolescent ratings than parental ratings exist.

Education level of parents, socioeconomic status, number of siblings, residential area, and other factors can influence family adaptability.

According to the results there was a greater degree of interaction in families with children and adolescents who suffer from mental disorder than in families from the control group. These unexpected results might be the consequence of a tendency of parents to present themselves in a socially desirable context. Presumably, as a reaction to a child's illness, family uses higher cohesion, more care, mutual support and interaction as a strategy. Cohesiveness and adaptability which are optimally develop can preserve the family structure with successfully overcoming expected and accidental life events. The lack of cohesiveness and conflicts in the family may predict unfavourable development of children. The factors which influence mental health can be divided into high-risk factors and protection factors and could be targets for intervention.

Various aspects of family relations and the atmosphere in the family may be predictive for social skills achievement of a child. Interventions should be sensitive to the stages of child and adolescents development and should promote family communication taking into consideration social and cultural differences. Multidisciplinary approach is necessary for realization of the objectives and their effect.

The present results were consistent with previous research which showed that family functions and adolescent problem behaviors do not have a curvilinear relationship. It was reported from previous study that family adaptability can be affected by socioeconomic education level of parents, number of siblings, financial status, residential areas and other factors. Thus, the higher mean score for family adaptability in our study might be explained by high education level of parents.

Social adaptation and attachment are partly overlapping due to their shared social nature. Attachment style develops by early parent-child interactions and demonstrates relative stability. It is very important to ensure an early relationship between a parent and a child in order to establish optimal functioning in various life segments. High-risk and protection factors can be targets for family-focused intervention with consideration of a culturally specific factors that may promote family communication about mental health. There are several limitations to the present study: it is cross-sectional in nature with a relatively small number of respondents from a narrow territory and only one parent completed the questionnaires. It would be interesting to compare evaluations of family functioning carried out by children suffering from a mental disorder as well as both their parents. Despite these limitations, the results of this study might provide useful information related to functioning of families with mentally ill children and may serve in counseling and treating children in clinical settings.

**Conclusion**

The present study found that families with mentally ill children had more frequent parental separation, more children per family, higher rate of unemployment of parents and lower socioeconomic status. There were more prominent cohesiveness and adaptability among families with mentally ill children, but adaptation was similar to families with healthy children.

This findings suggest that it would be useful to evaluate adaptability, cohesiveness and adaptation of primary families when planning prevention and rehabilitation of mentally ill children and adolescents.
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