FAMILY MODEL FAILURES. PSYCHOPATOLOGICAL RISKS

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Abstract:
Introduction: Conflicts and family violence, child abuse, low family support or lack thereof exacerbated affectivity, daily stress and alienation of the traditional model of the family and its protective climate cause psychiatric disorders (depression, anxiety, suicidal behavior, etc.).
Material and Methods: Multidisciplinary study on family model transformations and identifying population groups at risk for developing psychiatric disorders as a result of the action of non-harmonic family factors, conducted in two stages, in urban and rural areas, on a sample of 1200 subjects and a subgroup of 88 subjects by questionnaire, assessing the circumplex model of marital and family system (Olson, 1979) and the Woodworth - Mathews test.
Results: The profile of cohesion and adaptability between separated family members is one bonded-separate and flexible-structured, representing a balanced family model. Rigidity and strict adherence to rules are predominant, and the communication level is maintained within normal limits. Domestic violence was often manifested in more than 50% of the cases studied. Female gender is prone to emotion and obsessive and depression tendencies, in the context of family insecurity, resulting in risk factor for depression. Family violence is correlated with schizoid and impulsive epileptic tendencies.
Conclusions: Family dysfunctions become predictive factors of personality disorders that can attain pathological aspects. Family violence amplifies depressive and schizoid tendencies. The dissolution of the family model individually creates vulnerability towards the action of psycho-stress factors.
Keywords: family violence, cohesion, communication.

Rezumat:
Introducere: Conflictualitatea şi violenţa familială, abuzul asupra copiilor, scăderea suportului familial, exacerbarea afectivităţii sau lipsa acesteia, stresul cotidian, alienarea modelului tradiţional al familiei şi a climatului protectiv al acesteia conduc la apariţia tulburărilor psihiatrice (depresie, anxietate, comportament suicidar etc.).
Material şi Metodă: Studiu multidisciplinar privind transformările modelului familial şi identificarea unor categorii de populaţie cu risc pentru dezvoltarea unor tulburări psihiatrice ca urmare a acţiunii factorilor dizarmonici la nivelul familiei, realizat în două etape, în mediul urban şi rural, asupra unui lot de 1200 subiecţi şi a unui sublot de 88 de subiecţi, prin chestionar, evaluarea modelului circumplex al sistemului marital şi familial şi testul Woodworth – Mathews.
Rezultate: Profilul coeziunii şi adaptabilităţii între membrii familiei este unul separat-legat şi flexibil-structurat, reprezentând un model de familie echilibrat. Rigiditatea şi respectarea strictă a regulilor sunt predominente, iar nivelul comunicării se menţine în limite normale. Violenţa domestică s-a manifestat frecvent la peste 50% din cazurile studiate. Sexul feminin este predispus la emotivitate şi tendinţe obsesiv-psihastenice şi depresive, în contextul insecurităţii familiale constituindu-se în factor de risc pentru depresie. Violenţa familială se corelează cu tendinţele schizoide şi impulsive epileptice.
Concluzii: Disfuncţionalităţile familiale devin factori predictivi ai unor tulburări de personalitate ce pot căpăta aspecte patologice. Violenţa familială amplifică tendinţele depresive şi schizoid. Disoluţia modelului familial vulnerabilizează individual în faţa acţiunii factorilor de psihostres.
Cuvinte Cheie: violenţă familială, coeziune, comunicare.

INTRODUCTION

According to the World Health Report 2001 (1), over 450 million people are currently suffering from a psychiatric disorder, and one in four people will develop during lifetime a psychiatric or behavioral disorder. A wide range of social, economic and demographic factors contribute to the extent of this phenomenon, including poverty, social disadvantage, work-related stress, unemployment and alienation of the traditional family model, forced urbanization, violence and delinquency.

The most important environment in which the individual grows and evolves from the biological, psychological and social point of view, for a better functionality, the family should meet the following requirements: solving problems, good communication between members, affection, fulfillment of social roles by members and behavioral control. (2) Amplification of risk

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child abuse, low family support, or lack thereof affection exacerbation, substance abuse, daily stress, alienation of the traditional family model and its protective climate, maternal risk behaviors during pregnancy can lead to a series of psychiatric disorders such as depression, anxiety, suicidal ideation or behavior, addictions or behavioral disorders in persons exposed both during childhood and adolescence and later during lifetime (4, 5, 6, 7).

High emotional expression within the family, characterized by hostility, criticism, authoritarianism and emotional over involvement may lead to a significant increase in the rate of relapse in patients with schizophrenia (8), while persistence of depressive symptoms in adolescents with a diagnosis of severe depressive disorder is correlated with family dysfunction. (9)

Cultural differences in the perception of the family model and its functionality, the level of emotional involvement, control and communication specific to families in different societies, dissolution or alienation of traditional family models (e.g. divorce, children born out of wedlock) (10), modification of the family structure (i.e. increasing the number of single parent families in the North American societies) contribute to enhancing the risks these micro-groups members are exposed to, the possible association of ethnic background with psychiatric disorders, as well as enhancing the decrease of the individual's capacity to respond to the action of stress factors and in developing coping and defense techniques.

MATERIAL AND METHOD

This study is an investigation of multidisciplinary approach (public health, psychology, psychiatry, sociology, anthropology, oncology) and has the purpose of presenting the diversity and changes suffered by the family model, assessing the current situation of sexual-reproductive health and identifying population risk groups for developing psychiatric disorders as a result of the action of risk factors at the family level.

Performed in two areas of population, urban environment (Craiova) and rural environment (communes in Dolj County), over 1200 subjects, the research used, until the current phase, two working tools:

1. questionnaire to determine the current situation and identify types of protection against sexually transmitted diseases, intra-familial relationships, health and health risk behaviors, birth, contraception, abortion and early detection of genital and breast cancer;
2. group interview, in its developed form of focus group, centering the discussion on specific issues detected as a result of the survey.

The questionnaire used in the first phase included 119 items grouped into four areas covering the proposed scopes and was applied to the entire group of subjects - 1200 persons. Following the interpretation of the data obtained through this first instrument, there was made a subset of 88 subjects, gathered in 11 focus groups, on which there were applied the circumplex questionnaire for marital and family system (Olson, 1979) (11) and the Woodworth - Mathews test, for the purpose of emphasis the pathological splitting of some psycho-behavioral traits, largely encountered in the population.

The Circumplex Model of the marital and family system developed by Olson group more than 50 family therapy concepts and the specialty literature in four dimensions of family behavior: cohesion, adaptability, flexibility and communication. (12, 13)

The second instrument used in this stage, the Woodworth-Mathews test, has a particular value in identifying personality disorders and extroversion - introversion trends, showing eight significant psychopathological characteristics (emotion, obsessive - neurasthenic, schizoid, paranoid trends, and also hypochondria, depressive, histrionic, impulsive-epileptic trends, as well as instability and antisocial tendencies), their intensity degree, the type of environment that favors the pathological tendency (disorganized, conformist, subjective, aggressive, autocratic, etc..) and the predominant defense mechanisms.

The statistical analysis of results was performed using the SPSS statistical software package (SPSS Inc.) (14).

RESULTS

The subgroup under research by the two working tools mentioned (88 subjects on who there were identified specific psycho-social and medical problems - disorganized or dysfunctional families, domestic violence, intergenerational support, children from outside the marriage, low financial and economic status, reduced housing area, family members diagnosed with debilitating somatic or stigmatizing conditions: varicose ulcer, tuberculosis, multiple sclerosis, paralysis, obesity, cirrhosis) presented the following socio-demographic characteristics (Table no. 1).

Residence		Sex		Age					Educational level		
U	R	M	F	15-24 years	25-34 years	35-49 years	50-59 years	60 - years	Low	Medium	High
19	69	37	51	3	31	26	20	8	56	24	8
21.6%	78.4%	42%	58%	3.4%	35.2%	29.5%	22.7%	9,1%	63.6%	27.3%	9,1%

Table 1. Socio-demographic characteristics of the subgroup studied

According to the family circumplex model, between cohesion, adaptability and optimal family functioning there is a curvilinear relationship, with a good functionality, tending to have moderate degrees of cohesion and adaptability, while the less functional families tend to show extreme degrees of the same dimensions.

Results obtained from the questionnaire on family and marital circumplex model show that the profile of cohesion and adaptability among family members is of separate-bonded and flexible-structured type, representing a balanced family model from this perspective, this family model being fits to the national character. A major drawback is revealed in terms of adaptability profile of family ties, highlighting its extreme scores for a lack of rules (26.1%) or too much rigidity (12.5%) (Table no**. 2).**

Cohesion Profile	**%**	**Adaptability Profile**	**%**
Apart	18.2	Chaotic	26.1
Separated	39.8	Flexible	30.7
Bonded	33.0	Structured	30.7
Dependant	9.1	Rigid	12.5
Total	100	Total	100

Table 2. Profile of family cohesion and adaptability (Circumplex Model – Olson, 1979)

Cohesion is defined as an emotional bond among family members and adaptability is the ability to change the family system structure, role relationships and relationship rules in response to the action of stress factors. Clinical evaluation of the couple / family cohesion was achieved through questions that targeted emotional bonding, family involvement, marital relationship, parent-child relationship, internal boundaries (physical and emotional space and time), decision making and external boundaries (friends, interests, activities). In accordance with the traditional family model specific to the population of our country, we encounter an extremely low frequency of broken family ties (3.4%), but attention is drawn to the high percentage of dependent family profile (46.6%), an aspect even less profitable (Table no. 3).

The flexibility profile was assessed using the interview guide with questions that focused on leadership, discipline, negotiation, roles and rules established in the family. Evaluation of data obtained shows a high proportion of families were rigidity and strict adherence to rules are predominant and in this case we can talk about a national footprint on the traditional family model adopted by respondents.

Communication is important to facilitate the movement of families along the dimensions of cohesion and adaptability. In the interview structured based on Olson's circumplex model, communication within the family was evaluated based on answers to questions that focused on empathy, listening carefully, speaker's ability, self disclosure, clarity, continuity, respect and appreciation. Globally, the scores for those 88 subjects revealed a good communication between family members.

Cohesion Profile	**Frequency**	**Percent**
Apart, very low	3	3,4
Separately, low to medium	7	8,0
Bound, medium to high	37	42,0
Dependant very high	41	46,6
Total	88	100
Flexibility Profile	**Frequency**	**Percent**
Rigid, very low	45	51,1
Structured, low to medium	23	26,1
Flexible, medium to high	18	20,5

Table 3. Profile of cohesion, flexibility and family communication (Circumplex Model – Olson, 1979)

In an attempt to highlight a connection between violent behavior at family level, the experiences of subjects as witnesses or victims of parents violence, and the family model assessed by the circumplex model, there were no correlations found to be statistically significant. In the subgroup of patients, even though over 50% of the cases studied domestic violence was manifested from time to time and often, according to responses to the initial questionnaire, adaptability, cohesion and domestic violence does not correlate significantly (Table no. 4).

In childhood and / or adolescence have you seen or heard your parents hitting each other?	**%**	You have been hit, beaten by parents / other family members?	**%**
Never	46.6	Never	45.5
From time to time	42.0	From time to time	43.2
Often	11.4	Often	11.4
Total	100.0	Total	100.0

Table 4. Domestic violence at household in subgroup studied (88 subjects)

The Woodworth-Mathews test was the second tool used to assess the studied subgroup, to identify personality disorders and introversion-extroversion trends, as well as their possible correlation with the development in a climate dominated by family violence or exposure to violence. The results obtained from the use of the test show limit scores significant for obsessive-neurasthenic (39.8%) and depression - hypochondria - histrionic (40.9%) features, while the poignancy of paranoid trends is manifested in 26.1% of subjects; for the other features it may be said that the scores were within the limit of normality (Table no.5).

In interpreting the data from the application of the Woodworth - Matthews test, age, sex and area of residence were considered as the first influential variables. The results revealed the existence of statistically significant correlations ($p < 0.01$) between extreme scores (limit and poignancy) for female subjects emotionalism; the affect seizures may occur without any obvious reason manifested by agitation, crying, tendency toward violence, quick transfer from apathy to the affective explosion. Also, high scores were statistically significant ($p < 0.001$) for obsessive-neurasthenic trends, also for the female subjects, marked by reduced exercise capacity and increased psycho-nervous fatigue (Table no.6).

Out of the eight introversion-extroversion trends with psychopathological potential, highlighted in our study by the Woodworth-Mathews test, those depressive - hypochondria - histrionic were significantly correlated with the female sex ($p < 0.05$), women's vulnerability to depressive disorder being obvious and resulting in a real risk factor. Consolidation of depressive disorders in adolescence, affective disorders highlighted also by the scores for emotion, insecurity generated by a possible modification of the traditional family model, are also risk factors for depression onset and evolution.

Results for the Woodworth-Mathews test were correlated with the answers given by those 88 subjects in two of the original survey questions on issues regarding family violence and their exposure in childhood and adolescence, to violent behaviors generated by parents or guardians. Thus there were identified statistically significant correlations ($p < 0.01$) for schizoid tendencies, reflecting the fragility of thought and its susceptibility to disarticulation; however the limit scores for this trend, being obtained for subjects who underwent from time to time and often manifestations of family violence were surprising. Significant statistics ($p < 0.05$) were obtained also in correlating impulsive - seizures tendencies, manifested by impulsive and voluntarily without conscious control reactions, excessive in relation to the factor which has led to some state of agitation, insatiable, impulsive activity and employment in medium frequency exposure, measured from time to time in the initial questionnaire, the same value for chi square is obtained for depressive tendencies.

Scores obtained for the Woodworth-Mathews test were not significantly correlated with subjects` answers to the question concerning the frequency with which they were subjected in childhood or adolescence to violent treatment by parents or guardians. But an average frequency of such acts violence is noticed, with extreme scores in subjects with impulsive (20%) and emotional (14.3%) tendencies in terms of some common exposure to such treatments (Table no. 7).

DISCUSSIONS

The presented results show a tendency to change in the current socio-economic context the indigenous cultural family model specific to the national cultural area, a trend that is not perceived positively by those exposed, women being the most vulnerable, both in terms of a mental fragility and the social and family status. Failures that manifest in the level of family group adaptability to the demands of modern society, maintaining a certain degree of (inter) dependency of its members, and stiffness manifested in intergroup relations, as well as in the performance of roles within the family may be the predictive factors of personality disorders that can attain pathological aspects.

From the perspective of the effects of family violence manifested directly and indirectly on persons in childhood and adolescence, the data from our study is consistent with the literature, family dysfunction being correlated with depression and schizoid tendencies. This population represents a category of risk for abnormal development of the disorders in this class.

Dissolution of the family model specific to Romania's population, within the difficult socio-economic context of recent decades, contributes to decreased involvement of affective and emotional level of communication, with marked effect on the ability to adapt and respond to people affected by this malfunction during periods of childhood and adolescent development and vulnerability in front of psycho-stress factors action.

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Intensity of the feature / psychopathology feature	Limit		Normal		Significantly	
	Frequency	Percent (%)	Frequency	Percent (%)	Frequency	Percent (%)
Emotiveness	22	25	59	67	7	8,0
Obsessive-neurasthenic tendencies	35	39.8	45	51.1	8	9,1
Schizoid tendencies	22	25	65	73.9	1	1,1
Paranoid tendencies	23	26.1	65	73.9	23	26,1
Depressive - hypochondria-histrionic tendencies	36	40.9	44	50	8	9,1
Impulsive-epileptic tendencies	25	28.4	60	68.2	3	3,4
Instability tendencies	25	28.4	57	64.8	6	6,8
Antisocial tendencies	7	8	80	90.9	1	1,1

Table 5. Results for the Woodworth – Mathews test (88 subjects)

Intensity of the psychopathology feature Normal	Residence (%)		Sex (%)		Age (%)		Educational level (%)		
	U	R	M	F	<=35 years	>35 years	Low	Medium	High
Emotiveness	68.4	66.7	91.9	49.0	65.8	68.0	62.5	70.8	87.5
Obsessive-neurasthenic tendencies	57.9	49.3	75.7	33.3	52.6	50.0	44.6	58.3	75.0
Schizoid tendencies	63.2	76.8	78.4	70.6	68.4	78.0	75.0	62.5	100.0
Paranoid tendencies	68.4	75.4	81.1	68.6	76.3	72.0	73.2	70.8	87.5
Depressive - hypochondria-histrionic tendencies	57.9	47.8	67.6	37.3	52.6	48.0	46.4	50.0	75.0
Impulsive-epileptic tendencies	57.9	71.0	81.1	58.8	68.4	68.0	69.6	58.3	87.5
Instability tendencies	68.4	63.8	56.8	70.6	55.3	72.0	66.1	54.2	87.5
Antisocial tendencies	84.2	92.8	89.2	92.2	86.8	94.0	94.6	83.3	87.5
Intensity of the psychopathology feature Limit	**Residence (%)**		**Sex (%)**		**Age (%)**		**Educational level (%)**		
	U	**R**	**M**	**F**	**<=35 years**	**>35 years**	**Low**	**Medium**	**High**
Emotiveness	21.1	26.1	8.1	37.3	28.9	22.0	26.8	25.0	12.5
Obsessive-neurasthenic tendencies	31.6	42.0	24.3	51.0	42.1	38.0	42.9	37.5	25.0
Schizoid tendencies	31.6	23.2	21.6	27.5	31.6	20.0	23.2	37.5	0
Paranoid tendencies	31.6	24.6	18.9	31.4	23.7	28.0	26.8	29.2	12.5
Depressive - hypochondria-histrionic tendencies	21.1	46.4	32.4	47.1	36.8	44.0	44.6	37.5	25.0
Impulsive-epileptic tendencies	42.1	24.6	18.9	35.3	28.9	28.0	26.8	37.5	12.5
Instability tendencies	21.1	30.4	35.1	23.5	34.2	24.0	28.6	33.3	12.5
Antisocial tendencies	15.8	5.8	10.8	5.9	10.5	6.0	5.4	12.5	12.5
Intensity of the psychopathology feature Significant	**Residence (%)**		**Sex (%)**		**Age (%)**		**Educational level (%)**		
	U	**R**	**M**	**F**	**<=35 years**	**>35 years**	**Low**	**Medium**	**High**
Emotiveness	10,5	7,2	0	13,7	5,3	10,0	10,7	4,2	0
Obsessive-neurasthenic tendencies	10,5	8,7	0	15,7	5,3	12,0	12,5	4,2	0
Schizoid tendencies	5,3	0	0	2,0	0	2,0	1,8	0	0
Paranoid tendencies	0	0	0	0	0	0	0	0	0
Depressive - hypochondria-histrionic tendencies	21,1	5,8	0	15,7	10,5	8,0	8,9	12,5	0
Impulsive-epileptic tendencies	0	4,3	0	5,9	2,6	4,0	3,6	4,2	0
Instability tendencies	10,5	5,8	8,1	5,9	10,5	4,0	5,4	12,5	0
Antisocial tendencies	0	1,4	0	2,0	2,6	0	0	4,2	0

Table 6. Results for the Woodworth – Mathews test and correlations with age, sex, environment and educational level of the subjects

Intensity of the psychopathology feature	**Normal**			**Limit**			**Significant**		
Frequence to family violence exposure / **Psychopathology feature**	Never (%)	From time to time (%)	Often (%)	Never (%)	From time to time (%)	Often (%)	Never (%)	From time to time (%)	Often (%)
Emotiveness	44.1	44.1	11.9	54.5	36.4	9.1	42.9	42.9	14.3
Obsessive-neurasthenic tendencies	42.2	48.9	8.9	57.1	28.6	14.3	25.0	62.5	12.5
Schizoid tendencies	53.8	38.5	7.7	27.3	54.5	18.2	0.0	0.0	100.0
Paranoid tendencies	50.8	41.5	7.7	34.8	43.5	21.7	0.0	0.0	0.0
Depressive - hypochondria-histrionic tendencies	40.9	52.3	6.8	61.1	25.0	13.9	12.5	62.5	25.0
Impulsive-epileptic tendencies	48.3	45.0	6.7	36.0	40.0	24.0	100.0	0.0	0.0
Instability tendencies	52.6	36.8	10.5	36.0	48.0	16.0	33.3	66.7	0.0
Antisocial tendencies	47.5	40.0	12.5	28.6	71.4	0.0	100	0.0	0.0

Table 7. Exposure to family violence and results of the Woodworth – Mathews test

Intensity of the psychopathology feature	**Normal**			**Limit**			**Significant**		
Frequence to parental violence exposure / **Psychopathology feature**	Never (%)	From time to time (%)	Often (%)	Never (%)	From time to time (%)	Often (%)	Never (%)	From time to time (%)	Often (%)
Emotiveness	44.1	42.4	13.6	54.5	40.9	4.5	28.6	57.1	14.3
Obsessive-neurasthenic tendencies	42.2	46.7	11.1	51.4	34.3	14.3	37.5	62.5	0.0
Schizoid tendencies	47.7	41.5	10.8	40.9	45.5	13.6	0.0	100.0	0.0
Paranoid tendencies	46.2	41.5	12.3	43.5	47.8	8.7	0.0	0.0	0.0
Depressive - hypochondria-histrionic tendencies	43.2	47.7	9.1	52.8	33.3	13.9	25.0	62.5	12.5
Impulsive-epileptic tendencies	48.3	43.3	8.3	32.0	48.0	20.0	100.0	0.0	0.0
Instability tendencies	45.6	43.9	10.5	48.0	36.0	16.0	33.3	66.7	0.0
Antisocial tendencies	45.0	42.5	12.5	42.9	57.1	0.0	100.0	0.0	0.0

Table 8. The status of victim of parental violence and results of the Woodworth – Mathews test

REFERENCES

1.World Health Organization. WHO. *The world health report 2001: Mental health: new understanding, new hope.* Geneva, 2001.

2.Epstein NB, Bishop DS, Baldwin LM. McMaster model of family functioning: a view of the normal family. In: Walsh F (eds). *Normal family processes*. New York: Guilford Press, 1982, 138-60.

3.Harrington R. Causal processes in development and psychopathology. *Br J Psychiatry* 2001; 179:93–4.

4.Rutter M. Connections between child and adult psychopathology. *Eur Child Adolesc Psychiatry* 1996;5:4–7.

5.Lyons-Ruth K. Attachment relationships among children with aggressive behavior: the role of disorganised early attachment patterns. *J Consult Clin Psychol* 1996; 64:64–73.

6.Kendler KS, Gardner CO, Prescott CA. Toward a comprehensive developmental model for major depression in women. *Am J Psychiatry* 2002; 159:1133–45.

7.Rutter M. How the environment affects mental health. *Br J Psychiatry* 2005; 186:4–6.

8.Doane JA, West KL, Goldstein MJ, Rodnick EH, Jones JE. Parental communication deviance and affective style. Predictors of subsequent schizophrenia spectrum disorders in vulnerable adolescents. *Arch Gen Psychiatry* 1981; 38:679-85.

9.Goodyer IM, Herbert J, Tamplin A, Secher SM, Pearson J. Short-term outcome of major depression: II. Life events, family dysfunction, and friendship difficulties as predictors of persistent disorder. *J Am Acad Child Adolesc Psychiatry* 1997; 36:474-80.

10.Peterson JL, Zill N. Marital disruption, parent-child relationship and behavior problems in children. *Journal of Marriage and the Family* 1986; 48:295–307.

11.Olson DH. Circumplex model of family systems VIII: Family assessment and intervention. In: Olson DH, Russell CS, Sprenkle OH (eds.). *Circumplex Model: Systemic Assessment and Treatment of Families.* New York: Haworth Press, 1989.

12.Olson DH, Sprenkle OH, Russell CS. Circumplex model of marital and family systems. *Fam Proc* 1979; 18:3-28.

13.Olson DH. Circumplex model of marital and family systems: Assessing family functioning. In: Walsh F. (eds.). *Normal Family Process.* New York: Guilford Press, 1993.

14.Jaba E. Statistics. Bucharest: Ed. Economică, 2007.