

---

**OBSSESSIVE-COMPULSIVE BEHAVIOR OF HEMOPHILIACS PATIENTS****Lavinia Maria Hogeia Phd.****“V. Babeş” Medicine and Pharmacy University-Psychology Department, Timisoara**

*Abstract: Along with numerous disorders, hemophilia patients are facing a lot of psychological problems. This study aims to assess obsessive-compulsive behavior in patients with hemophilia. The data obtained may be useful to psycho-medical staff working in this field and contributes to the channeling of the particular psychotherapeutic intervention or counseling.*

*Medical treatment is not enough to improve the quality of life, the various psychosocial issues should be considered, so that the patient may face reality more easily. For this reason it is necessary to involve a multidisciplinary team. This team is composed of different doctors, psychologists and social service employees.*

**Keywords:** *obsessive-compulsive behavior, hemophilia, quality of life.*

**Introduction**

**Obsessive-compulsive disorder** is a form of anxiety that is manifested by unjustified thoughts and fears which then turn to obsessions and lead to a repetitive and compulsive behavior. People who come to realize that they have certain unjustified obsessions and that they are suffering from obsessive-compulsive disorder, are trying to ignore them and even cease to materialize them into action. However, this attempt of ignoring the obsessions does nothing but increase the sensation of stress and anxiety. Finally, in order to reduce the stress sensation, these people will resort to repetitive acts [Postel, J., Dictionary of clinical psychiatry and psychopathology, 1998].

**Obsessive-compulsive disorder** often focuses on a specific fear: the fear of germs contamination or the fear that someone close to you might get sick, etc. For the fear to disappear in some extent, they get to avoid certain objects, germs, etc. But the fear continues to occur, leading to the installation of a ritualistic behavior [idem].

**Hemophilia** is a a genetically transmitted disorder being part of the category of rare diseases, diseases that, due to the facing of many problems, the devastating and incapacitating developments, enjoy the existence of a particular treatment, a treatment that requires a continuous usage throughout life. Hemophilia, like other rare diseases, is a debilitating, incapacitating, life threatening that decreases the quality of life chronic disease, and it requires endeavor and a special support from the community.

**Purpose**

We assume that the form of hemophilia, alexithymia, general health, physical functioning, social relationships are predictors for the obsessive compulsive behaviors in patients with hemophilia.

**Materials and methods**

The study group consists of 100 patients with hemophilia A and B, who are in the record and treatment of the Clinical Assessment and Rehabilitation Centre „CristianŞerban” from Buzias and of the Pediatric Clinic of Timisoara, during 2009-2012; with ages between 16 and 45 years.

From the subjects that participated in the study a total of 71 subjects were diagnosed with hemophilia A (35.5%) and 29 subjects were diagnosed with hemophilia B (14.5%). According to the form of severity there were 83 subjects diagnosed with severe hemophilia (41.5%), 13 subjects diagnosed with hemophilia average (6.5%) and 4 diagnosed with mild hemophilia (2%).

The data was collected by using the following questionnaires: **SECOC** (The Rating Scale of the obsessive-compulsive behaviors - the Yale - Brown Scale) for the level measurement of obsessive-compulsive behaviors, **TAS** (Toronto Alexithymia Scale) for measuring alexithymia. . And for measuring the dimensions: general health, physical functioning and social relations the results in health and quality of life questionnaires (SF-36 MOS-) and World Health Organization Quality of Life (WHOQOL) were used.

## Results

In order to test the hypothesis a two steps - multilinear hierarchical regression was conducted. Since both the dependent variable or criterion (the obsessive compulsive behaviors) and the predictors are measured by a numerical scale, this means that the conditions of using linear regression have been satisfied [Sava F., 2004]. In the first part the criterion as the hemophilia form (mean severe) was introduced for this variable to be kept under control, and in the second part, the following analyzed predictors were introduced: the hemophilia's form, alexithymia, general health, physical functioning, social relationships domain.

In order to identify a possible situation of multicollinearity, the correlation matrix between the predictors included in the study was realized.

**Table.1.** The correlation matrix of the variables in question

	forma hemofiliei	Alexitimia	sănătate generală	funcționare fizică	domeniul relații sociale
forma hemofiliei	-				
alexitimia	.00	-			
sănătate generală	-.16	-.32	-		
funcționare fizică	-.27*	-.20*	.52*	-	
domeniul relații sociale	-.03	-.23	.13	.25*	-

According to the data in Table 1 in which the array of correlation between the predictors included in the model is presented, a situation of multicollinearity has not been identified. Analyzing Table 3 we notice that between the form of hemophilia, alexithymia,

general health, pain, the field of environment there are no strong correlations, which indicates the fact that the possibility of a situation of multicollinearity to appear is reduced [idem].

**Table.2.** The value of  $R^2$  and the adjusted value of  $R^2$

<b>Model Regresie</b>	<b>R</b>	<b>R<sup>2</sup></b>	<b>R<sup>2</sup> Ajustat</b>
<b>1</b>	<b>.076</b>	<b>.006</b>	<b>-.004</b>
<b>2</b>	<b>.494</b>	<b>.244</b>	<b>.203</b>

**Table.3.** The value of the significance test F

<b>Model Regresie 1</b>	<b>Suma pătratelor</b>	<b>Df</b>	<b>Media pătratelor</b>	<b>F</b>	<b>Sig</b>
Regresia	27.639	1	27.639	.572	.451
Reziduri	4736.471	98	48.331		
Total	4764.110	99			
<b>Model Regresie 2</b>	<b>Suma Pătratelor</b>	<b>Df</b>	<b>Media pătratelor</b>	<b>F</b>	<b>Sig</b>
Regresia	1160.448	5	232.090	6.054	.000
Reziduri	3603.662	94	38.337		
Total	4764.110	99			

Following the data analysis, it appears that the first model does not explain the data dispersion better, than the one based on the average,  $F(1,98) = .572$ ,  $p > .05$ . The model number 2, includes, besides the form of hemophilia and alexithymia, general health, physical functioning and social relations, being significantly better than the one that was obtained using the average with the values  $F(5,94) = 6.054$ ,  $p < .001$ . Out of the five predictors, four of them are presenting themselves statistically significant as shown in Table 3. This model is able to explain in an adjusted form, a proportion of 20.3% ( $R^2$  adjusted = .203) from the evolution of the level dispersion of the obsessive compulsive behaviors, while the remaining 79.7% remains unexplained, as it is due to other factors, that are not introduced into the regression model.

**Table.4.** The value of the predictors which are included in the regression model

<b>Predictorii Model 2</b>	<b>Coefficienți Nestandardizați</b>		<b>Coefficienți standardizați</b>	<b>t</b>	<b>Sig.</b>
	<b>B</b>	<b>Eroarea standard</b>	<b>Beta</b>		
Interceptul	-28.411	9.498		-2.991	.004
forma hemofiliei	.669	1.302	.048	.514	.609

alexitimia					
sănătate generală	.248	.054	.444	4.579	.000
funcționare fizică	.088	.044	.217	1.985	.050
relații sociale	-.082	.035	-.261	-2.356	.021
	1.711	.580	.279	2.947	.004

Furthermore, Table 4 gives us important information about those predictors that contribute to the effectiveness of the model as well as about their percentage in the regression model. Based on the t test of significance presented in Table 1 it is found that out of the five predictors included in the model, four of them are contributing statistically significant to the development level of the obsessive-compulsive behaviors in patients with hemophilia respectively alexithymia, general health, physical functioning and social relations.

Alexithymia has a positive value ( $b = .248$ ), therefore it establishes a direct relationship between alexithymia and the level of obsessive compulsive behaviors. Thus when alexithymia increases by one unit, the level of obsessive compulsive behaviors tends to increase by one unit (ie by 0.24) given that the influence of the other predictors is kept constant.

General health has a positive value ( $b = .088$ ), therefore a direct relationship between general health and the level of obsessive-compulsive behaviors is established. Thus, when it increases by one unit, the level of obsessive compulsive behaviors tends to increase by one unit (ie 0.08) given that the influence of the other predictors is kept constant.

The physical functioning predictor has a negative value ( $b = -.082$ ), thus establishing an inverse relationship between physical functioning and the level of obsessive-compulsive behaviors. Thus, when it increases by one unit, the level of obsessive compulsive behaviors tends to decrease by one unit (ie 0.08) given that the influence of the other predictors is kept constant.

The field of social relationships has a positive value ( $b = 1.711$ ) therefore establishing a direct relationship between the field of social relations and the level of obsessive-compulsive behaviors. Thus, when it increases by one unit, the level of obsessive compulsive behaviors tends to increase by one unit (ie to 1.71) given that the influence of the other predictors is kept constant.

## Conclusions

Following the statistical analysis, the following conclusions emerged:

The prevalence and the level of alexithymia were higher in patients with low perspective on health, with reduced social relations and obsessive compulsive behaviors ( $R^2$  adjusted = .203).

In the academic literature there are many studies that investigated the relationship between alexithymia and obsessive-compulsive behavior. Significant correlations were observed between alexithymia and severe obsessive compulsive disorder.

In a study published by Zeitlin and McNally that included a total of 27 patients with panic disorder and 31 patients with obsessive-compulsive disorder, they showed that not only

patients with obsessive-compulsive disorder presented alexithymia, but those with panic disorder obtained a higher score of alexithymia [Zeitlin, S., et al., 1993].

Lumley and his collaborators examined the relationship between alexithymia and the usage of health services on a number of 911 young adults. Results showed that subjects presenting difficulties relating to identifying and describing their feelings (DIF and DDF) used more often both the ambulatory treatment and psychotherapy, while subjects with high scores on the dimension of outward thinking (EOT) considered that the ambulatory treatment was less effective and did not undertake any psychotherapy [Lumley M. et al., 1996].

Several studies have reported a significant positive correlation between alexithymia and depression under normal conditions as well as in pathological cases. The study made by Parker and his colleagues showed a significant correlation between depression, measured by Beck Inventory (BDI), on a sample of students, and alexithymia, measured with the inventory TAS-26. Our data is in accordance with this observation because hemophiliac patients obtained low scores in the psychological and alexithymia field, compared to the individuals from the control group [Parker J. et al., 2001].

In addition, Honkalampi and his collaborators (2001) using the TAS-20, certify the fact that the severity degree of depression was significantly statistically associated with alexithymia.

Luminet and his collaborators (2001) found that although alexithymia results may change in the presence of major depressive symptoms however, stability is found, claiming that this construct is more like a stable personality trait rather than an independent phenomenon. [Honkalampi K. et al., 2001; Luminet O. et al., 2001, 254-260]

Health is defined as an important factor in the quality of life and it refers to:

- Absence of disease. In this case, health indicators are the data on mortality, morbidity and life expectancy;
- The adaptation and good functioning of the individual to his environment;
- The physical mental and social well-being, becoming a value according to WHO [Rapport pour le SPF, 2004].

In the current study has been established a direct relationship between the obsessive compulsive behaviors and overall health, meaning that the more careful and cautious they are, by avoiding bumps and falls and the protection related to their clothing choice, the more they assess their general health status as being better.

The relationship between the scale of physical functionality and obsessive-compulsive behaviors is a reversed one, which means a significant decrease in the daily activity given that the protection and insurance behavior level, is an increased one.

The more the level of obsessive compulsive behaviors increase, the more their need for social support is higher. Social support explores how the person feels the assistance, commitment, encouragement from family and friends.

During a study conducted in 2010, the relationship between the obsessive compulsive symptoms and the life quality of a patient with obsessive-compulsive disorder has been assessed. At that study, 53 patients with obsessive-compulsive disorder and 53 people from the community have been evaluated, using a structured interview for DSM-IV Diagnostic Clinic and the short form of the survey SF-36 for a healthy life. Thus it was concluded that

patients with obsessive-compulsive disorder have shown a significantly lower level of the quality of life in all dimensions measured by SF-36, excepting the pain scale. This study is consistent with the previous submitted results, in which the scales of the quality of life that were measured from study patients with SF-36, general health, physical function, social relationships are related to obsessive-compulsive behavior [Isabela S. et al., 2010] .

Regarding the form of hemophilia, it does not influence the appearance of obsessive-compulsive behaviors.

### **BIBLIOGRAPHY:**

- Barlow J.H., Stapley J., Ellard D.R., “Gilchrist M. Information and self management needs of people living with bleeding disorders: a survey”, *Haemophilia* 2007, 13 (3), 264-70.
- Beeton K., Neal D. & Lee C., “An exploration of health-related quality of life in adults with haemophilia – a qualitative perspective”, *Haemophilia* 2005, 11, 123-132.
- Beeton K., Neal D., Watson T. and Lee C., “Parents of children with Haemophilia – a transforming experience”, *Haemophilia* 2007, 13, 570-579.
- Bullinger M & Von Mackensen S., “Quality of life assessment in haemophilia”, *Haemophilia* 2004, 10 Suppl 1, 9-16.
- Bullinger M., MD, PhD, Von Mackensen S., MD, and the Haemo- QoL Group, “Quality of life in children and families with bleeding disorders”, *J. PediatrHematolOncol.* 2003, Volume 25, Suppl 1.
- Canclini M, Saviolo-negrin n, zanon e, et al., “Psychological aspects and coping in haemophilic patients: a case-control study”, *Haemophilia* 2003, 9(5):619-624.
- Cassis R.M.Y. “Psychosocial care for people with haemophilia”, *Treatment of Hemophilia*, 2007, No: 44.
- Catapano, F., Sperandeo, R., Di Martino, S., Bartoli, L., Maj, M., “Insight e resistenzaneipazientiossessivi”, *GiornaleItaliano di Psicopatologia*, 1996, 2:126–132.
- Gringeri A. & Von Mackensen S., “Quality of life in haemophilia”, *Haemophilia* 2008, 14 Suppl 3, 19-25.
- Honkalampi K. et al., “Alexithymia and depression: a prospective study of patients with major depressive disorder”, 2001, 229–234;
- Ioniță H., Poenaru D.V., Ritli L., “O viață cu hemofilie”, *EdituraBrumar, Timișoara*, 2009.
- Isabela S. et al., „Quality of life and symptom dimensions of patients with obsessive-compulsive disorder”, 2010, 198-203.
- Luminet O. et al., “An evaluation of the absolute and relative stability of alexithymia in patients with major depression”, 2001, 254–260
- Lumley M. et al., “How are alexithymia and physical illness linked? A review and critique of pathway”, *Alexithymia and Health Care Utilization*, 1996
- Murphy B., *Australian WHOQOL-100, WHOQOL-BREF and CA- WHOQOL Instruments. User’s Manual and Interpretation Guide* 2000, 1-4.
- Parker J. et al., “The Relationship Between Emotional Intelligence and Alexithymia”, 2001, 107-115
- Postel, J., “Dicționar de psihiatrieși de psihopatologieclinică”, *UniversEnciclopedic, București*. 1998.
- Rapport pour le SPF, 2004
- Ross, J., “Perspectives of haemophilia carriers”, *Treatment of Hemophilia*, 2004, No: 8.
- Sava F., „Analizadatelor in cercetareapsihologica. Metodestatisticecomplementare”, 2004

Wilkinson R.G., "Socioeconomic determinants of health: Health inequalities: relative or absolute material standards", *BMJ* 1997; 314:591.

Zeitlin, S., et al., "Alexithymia and anxiety sensitivity in panic disorder and obsessive-compulsive disorder", 1993.