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Antecedents of primary and secondary acute social withdrawal

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Abstract

Background. The phenomenon of acute social withdrawal (ASW) is becoming more common and widespread nowadays and can be characterized by complete solitude/alienation from society for 6 months or longer. Previous studies of the ASW included patients with mental disorders and were focused on the psychopathological features of secondary ASW caused by depression, social phobia, or bulimia.

Aim. To increase the effectiveness of acute social withdrawal differential diagnostics by determining the etiopathogenetic factors of its development and psychopathological features to improve further management of this condition.

Materials and methods. At the Department of Psychosomatic Medicine and Psychotherapy of Bogomolets National Medical University 70 patients with ASW were examined: the first experimental group (EG1) - patients with mental disorders and ASW (n = 42), and the second (EG2) - a mentally healthy contingent with primary ASW (n = 28). Healthy people without ASW (n=56, control group, CG) as well were examined. The following methods were used: Buss Durkee Hostility Inventory, Victim Behavior Questionnaire, Toronto Alexithymia Scale (TAS-26), Leongard-Schmishek Accentuated Personality Trait Questionnaire, Life Event Questionnaire (LEQ), Chaban Quality of Life Scale.

Results. Comparing EG and CG regarding significance, there were determined several differences. The level of alexithymia in the EG was significantly higher than in the CG ($p<0.005$). The quality of life in the EG was significantly lower than in the CG ($p<0.005$). According to the Leongard-Schmishek test in EG accentuated personality traits such cyclothymia, hyperthymia, dysthymia, anxiety ($p<0.005$), pedantic ($p<0.05$), demonstrativeness ($p<0.1$) were significantly higher than in the CG. According to the Buss-Durkee Hostility Inventory, such indicators as resentment ($p<0.005$), irritability ($p<0.05$), suspicion ($p<0.05$) and, as a consequence, an index of aggression (IA), ($p<0.05$) were significantly higher than in CG. The results of Life Traumatic Events Questionnaire (LEQ) demonstrated that the impact of traumatic events index ($p<0.05$) and the trauma index (TI) ($p<0.05$) in EG were significantly higher than in the CG. As a result of the comparison of the correlation matrices of the E1 and the E2, it was found that the groups differ both in the number of statistically significant links and in the correlation structure.

Conclusion. In this study, the psychopathological features of patients with ASW were determined in comparison with healthy control group. It was confirmed that the patients with primary ASW differ from patients with secondary ASW and have other antecedents of this behaviour.

Keywords: `acute social withdrawal`, `hikikomori`, `solitude`

1 Introduction

Recently, in many countries, which have similar contemporary socioeconomic environments, including a social change movement, financial unsafety, economic crisis, irregular employment opportunities, increase of unemployment, a stopped or downward social mobility movement among the youth and the widespread use of the Internet and virtual reality the acute social withdrawal (ASW) phenomenon has emerged, and Ukraine is not an exception [1].

The concept of a hermit or a recluse exists in many cultures for a long time. But the phenomenon of social isolation is becoming more common in the context of increasing global communication. Communication via the Internet and using cell phones with multifunction reduces personal contacts, which leads to an exacerbation of social withdrawal [2].

The phenomenon of ASW describes a psychopathological and sociological behaviour, which is characterized by complete isolation/withdrawal from society for 6 months or longer, not caused by psychosis or mental retardation. This behaviour contains elements of social withdrawal (withdraw from society, avoid attending school or work, at least six months), and social isolation (termination of a relationship outside the family during isolation).

Scientists distinguish secondary acute social withdrawal (by aetiology), for example caused by mental disorders such as social phobia, depression, dementia or autistic spectrum disorders; or chronic physical illnesses, injuries. Patients with a major depressive disorder feel difficult to maintain a conversation because of anhedonia, problems with concentration or decreased vital functions during the exacerbation of the disease. A patient with an eating disorder, especially bulimia nervosa, often wants to avoid the gaze of others, the threat of being observed by others makes him remain at home when the weight of the body has risen contrary to the expectations. The fear of panic attack (sudden development of symptoms like palpitations, lack of air caused by acute anxiety) in patients with panic disorder, tend them to remain at home, as a safe place, avoiding places of uncertainty in the situation of emergency [3].

Comorbidity of with other psychiatric disorders (affective and behavioural disorders, substance abuse, anxiety, phobia, personality disorders) is 54.5%, and in half of the cases, acute social withdrawal occurs without comorbid mental disorders or physical illness [4]. A number of cases with significant psychopathology do not meet the criteria for existing mental disorders (described in DSM-5 or ICD-10). Taking into account the level of social dysfunction and the duration of symptoms we have to study more this phenomenon. Idiopathic (primary) acute social withdrawal is increasingly becoming a case of resistance to treatment. This is a serious problem in clinical practice since drug therapy gives only a partial effect by acting on symptoms of depression or anxiety and has a limited impact on social isolation [5]. An important question remains without clear answer. What are the antecedents of the development and clinical course of primary acute social withdrawal? The answer would give us a key to the organization of medical care for patients with such psychopathology.

Previous studies of ASW included patients with mental disorders and were focused on the psychopathological features of secondary ASW (e.g., comparing social anxiety disorder patients with or without ASW) [6]. The aim of the recent studies in primary and secondary ASW was not to compare these groups, and had limited number of participants with primary ASW (n = 5, n = 10) [4],[7]. Described models of ASW development also were based on the research of mixed cohorts of patients [7]. Therefore, the importance of studying the psychopathological features of patients with ASW is to confirm or disprove the hypothesis that the presence or absence of mental pathology determines the clinical course and prognosis of the acute social withdrawal through the various antecedents for its development.

The aim of the study: to increase the effectiveness of acute social withdrawal differential diagnostics by determining the etiopathogenetic factors of its development and psychopathological features to improve further management of this condition.

2 Methods and materials

2.1 Assessment tools

Loneliness is a prolonged state of emotional distress that occurs when a person feels alienated, misunderstood or rejected by others. We assume that in a case of ASW in anamnesis there was a fact of directed aggression or rejection from others, as well as the experience of such situations as traumatic, and person might feel him/herself as a victim. In order to evaluate victimization, we have used a questionnaire

to detect the tendency toward victim behaviour created by O. Andronnikova [8]. The Life Experience Questionnaire, LEQ (Norbeck, 1984; Sarason et al., 1978, adapted by N.V. Tarabarina et al.), was used to detect the traumatic life events, assess the intensity and their impact on life [9]. The presence of a traumatic experience is associated with alexithymia, the level of Alexithymia was measured by Toronto Alexithymia Scale (TAS-26, G.J. Taylor et al., 1985) [10]. We hypothesise that people with ASW due to alexithymia and traumatic experience, choose social isolation as a way of adjusting to an aggressive environment, and indirect hostility (resentment, suspicion) is more typical for them than expressed hostility. The level of aggressiveness was measured by Buss-Durkee Hostility Inventory (BDHI), 1957, standardized by AA Hwan et al., in 2005. Due to the impact of stressful adverse events, personality traits can become pathological, interfering with the structure of the person and violating the adaptation to the environment. Accordingly, for the psychological analysis of personality traits, we used the Leonhard-Schmishek Test. The study also suggested that acute social withdrawal affects the quality of life and it will be lower in experimental than in control group. The quality of life level was studied using the Chaban quality of life scale.

For statistical analysis used descriptive statistical methods, Student criteria (T-test) for unrelated variables, and one-factor analysis of variance ANOVA. The data is presented as the mean (M) $\pm$ standard deviation (SD) for continuous variables and numbers (percentages) for categorical variables. Statistical significance was considered to be with the probability p <0,05. The correlation was determined by the Pearson method for a two-way mixed model. IBM SPSS Statistics Version 22 software packages were used for analysis. Copyright IBM Corporation 2013.

2.2 Sample description

The study was conducted at the clinical base of the Psychosomatic Medicine and Psychotherapy Department at the Bogomolets National Medical University. During the study 126 people were examined. Patients with acute social withdrawal (n = 70) that meet the inclusion criteria (see Appendix 6) were referred to the experimental group (EG), lately divided into two: patients with mental disorders and ASW who had undergone outpatient or inpatient treatment in the psychiatric department (n = 42) formed the first experimental group (EG1), and the second experimental group (EG2) consist of a mentally healthy people with acute social withdrawal (n = 28). Mental state in order to diagnose or exclude psychiatric comorbidity was assessed by a psychiatrist in accordance with ICD-10. Exclusion criteria were: schizophrenia, dementia, mental retardation, Asperger's syndrome, autistic spectrum disorders, and ASW caused by chronic physical illnesses. The control group (CG), consists of 56 psychologically healthy people without social isolation. The experimental group and the comparison group were representative by gender and age.

3 Results

3.1 Demographic data

There were no significant differences between groups by age and sex (Table 1, Table 2). But the analysis of the demographic data has shown discrepancies between EG and CG. Patients with ASW were mostly single, had incomplete higher education and were unemployed or free-lance workers (Table 2).

3.2 Psychodiagnostic assessment results

The mean age of acute social withdrawal manifestation in EG was 21.3 ($\pm$6.3) y. o., (EG1: 20.5 ($\pm$5.9) EG2: 22.7 ($\pm$6.9). In EG at least one diagnosis had 60% of participants (n=42). Personality disorder (15.7%), PTSD (11.4%), major depressive disorder (7.2%), social phobia (7.2%), obsessive-compulsive disorder (7.2%), bulimia nervosa (4.2%) were the most common. Comparing EG and CG in terms of significance (according to T-test), following features were determined:

- The level of alexithymia in the EG is significantly higher

Table 1: Experimental and control group age.

Group	n	Mean (SD)	Min	Max
CG	56	26.8 (9)	19	46
EG	70	25.4 (6)	18	40
EG 1	42	25.2 (5.6)	18	39
EG 2	28	25.6 (6.8)	19	40

than in the CG (p<0.005); (M = 71.7, SD = 10.7 vs M = 61.2, SD = 13.4).

- The quality of life in the EG is significantly lower than in the CG (p<0.005); (M = 12.5, SD = 3 vs M = 19.3, SD = 3.5).
- According to the Leongard-Schmishek test such accentuated personality traits as cyclothymia, hyperthymia, dysthymia, anxiety (p<0.005), hyper-exactness (p<0.05) demonstrativeness (p<0.05) were significantly higher in the EG than in the CG.
- According to the BDHI, such indicators as resentment (p <0.005), irritability (p <0.05), suspicion (p<0.05) and, as a consequence, an index of aggression (p<0.05) were significantly higher than in CG; (Index of aggression: M = 22.7, SD = 7 vs M = 18, SD = 7.4).
- LEQ found that the total impact of traumatic events (p<0.05) and the trauma index (TI) (p<0.05) were significantly higher than in the CG (TI: M = 2.97 SD = 0.95 vs M = 2.23, SD = 1).

Table 2: Demographic data of patients with ASW (EG) and control group.

		EG		CG	
		n	%	n	%
Gender	Male	24	34.3	22	39.3
	Female	42	65.7	34	60.7
Family status	Single	48	68.6*	22	31.4
	In relationship	14	38.9	22	61.1
	Married	8	44.4	10	55.6
	Divorced	0	0	2	100
Educational level	Secondary incomplete	2	100	0	0
	Secondary complete	12	35.3	22	64.7
	Vocational training	4	33.3	8	66.7
	Higher incomplete	28	82.4*	6	17.6
	Higher complete	24	54.5	20	45.5
Occupation	Unemployed	38	67.9*	18	32.1
	Part time	16	50	16	50.0
	Full Time	6	21.4	22	78.6
	Free-lance	10	100*	0	0

The level of alexithymia among males was on average higher than among female in all study groups (Table 3). The psychological characteristics of patients in the experimental group included the following: difficulties in identifying and expressing (verbalizing) own emotions and recognising emotions of others; problems in recognizing emotions and bodily sensations; decreased ability to symbolize; focus mainly on external events; tendency to concrete, logical way of thinking with a lack of emotional reactions.

According to the Life Event Questionnaire (LEQ), a gender difference was found, the amount of lifespan traumatic events (a), the total impact of trauma (b) and trauma index (c) among women (EG and CG) was higher than among men ($p \geq 0.05$). A statistically significant difference was found in total impact of trauma between EG and CG (predominantly because of a male gender in EG 2 group (EG1 M=7,715,4 vs EG2 M=1911,5), although total number of traumatic events was not statistically different between these study groups. Impact of trauma on patients with ASW without any psychiatric disorders (EG 2) was self-evaluated significantly higher than in EG 1 and CG. Trauma index (Total impact of trauma/Total number of traumatic events) was significantly higher (p = 0.019) in EG than in CG, which indicates the presence of traumatic stress (Table 4).

M=male; F=felale; CG=control group; EG=experimental

Table 3: Alexithymia level (TAS-26) in EG and CG.

Group	Gender	Mean	SD
EG	Male	74.5	9.9
	Female	70	11.1
	Total	71.7	10.7
EG 1	Male	74.7	11.9
	Female	68.8	11.4
	Total	70.7	11.6
EG 2	Male	74.3	7.9
	Female	72.6	10.7
	Total	73.4	9.2
CG	Male	64.8	13.3
	Female	58.6	13.3
	Total	61.2	13.4

Table 4: Data analysis of life events questionnaire.

Group	Mean	SD	Min	Max
Total number of traumatic events				
CG	4.4	4	0	16
M	3.3	2.4	0	9
F	5.2	4.1	0	16
EG	6	3.9	1	19
M	4.7	2.7	1	12
F	6.9	4.3	2	19
EG 1	5.5	4	1	19
M	3.4	1.6	1	6
F	6.5	4.5	2	19
EG 2	7	5	3	15
M	6.2	3.1	3	12
F	7.7	4.1	3	15
Total impact of trauma				
CG	11.2	10.6	0	45
M	7.6	8.2	0	30
F	13.9	11.5	0	45
EG	18.4	13.9	3	61
M	12.9	10.2	3	13
F	21.8	14.9	6	61
EG 1	16.2	13.6	3	61
M	7.7	5.4	3	17
F	20.5	14.6	6	61
EG 2	22*	14	5	49
M	19*	11.5	5	39
F	24.6*	16.3	7	49
Trauma index				
CG	2.23	1.08	0	4.2
M	1.81	0.9	0	3.3
F	2.52	1.1	0	4.2
EG	2.97*	0.95	1	4.3
M	2.64	1.1	1	4.2
F	3.18	0.8	1.75	4.3
EG 1	2.99	1	1	4.3
M	2.38	1.2	1	4.2
F	3.26	0.7	2	4.3
EG 2	2.98	0.8	1.66	4.3
M	2.95	0.8	1.66	4
F	3.00	0.9	1.75	4.3

group; * $p \geq 0.05$

After comparison EG1 and EG2 with the T-test, significant differences in the mean were found only in the indicators of the Buss-Durkee Hostility Inventory: assault ($p<0.05$), and negativism ($p<0.05$).

3.3 The main results of the comparison of EG1 and EG2 correlation matrices

The analysis has shown the following:

1. The groups differ both in the number of statistically significant links and in the correlation structure. The number of such links is interpreted as the complexity of the correlation structure of the group (Table 5).

2. In a group of patients without a psychiatric diagnosis (EG2), there were fewer links (68 versus 78). Therefore, it can be stated that its structure is simpler. One of the possible reasons is the lack of formation of the correlation structures in this group.

3. In EG1 only one characteristic, affectivity/exaltation, with 7 significant correlations was found to be the most connected. In EG2 there were two characteristics found to be the most connected to others: index of hostility and resentment (8 significant correlations).

4. The most significant characteristic from the EG1 affectivity/exaltation was not found among significant links of the EG2 at all, which may indicate to qualitative differences in the correlation structures of these two groups.

5. It is worth to emphasize the characteristics with the maximum number of strong paths ($p<0.01$). In EG1, they coincide with the most connected characteristics - the index of hostility and the index of aggression (6 total significant correlations) have 4 strong paths, and resentment - 3. In EG2, the situation is radically different. A quantitatively significant characteristic of affectivity/exaltation has only one strong connection from eight. The strongest was the total number of traumatic events, which has 4 strong paths with 4 significant ones. On the second place, there was the characteristic hyper perseverance, in which there are 3 strong paths out of three.

6. Figure 1 shows the correlation graphs (pleiades) obtained with correlation matrices. It gives us visual con-

firmation of the lack of formation of correlation structure in EG2. Thus, the characteristics total number of traumatic events, suspicion, index of hostility, total impacts of trauma, cyclothymia clearly do not form an explicit group, since three of these characteristics are related to others: cyclothymia with affectivity/exaltation, irritability and excitability; total impact of traumatic events with the trauma index; index of hostility with emotivity.

7. In the other group, there was at least one clearly defined structure and two - less pronounced. In Figure 2 this structure is determined by the characteristics total number of traumatic events, total impact of traumatic events, hyperthymia and the inverse association with alexithymia. Note that the inverse connection of hyperthymia and dysthymia is natural and can not be taken into account. One of the confirmations of the naturalness of this connection is the significant links with the characteristic of quality of life in both groups. So, in EG2, dysthymia had inverse connection to quality of life, then in EG1, hyperthymia was directly related.

8. The following correlation structure of EG1 includes index of hostility, which is supported by the index of trauma, dysthymia, suspiciousness, negativism, victimization, hyper perseverance and resentment. The latter is linked to irritability, excitability, indirect hostility and the general index of aggression.

9. Finally, the structure of characteristics associated with hostility is visually separated.

4 Discussion

For patients from EG 1, the total number of traumatic events and their impact on life were inversely related to the level of alexithymia. People who retain the ability to distinguish their feelings marked a higher number of traumatic events and were aware of their impact on life. But this correlation structure is separated from other indicators in the correlation matrix. It is difficult to apply the theory regarding this category of patients that traumatic events affect the manifestations of alexithymia, hostility, victim behaviour or personality traits.

The distribution of other links seems to be logical, the level of assault, verbal and indirect hostility forms an index of aggression, in combination with excitability and irritability creates an aggressive outward reaction, as a protective mechanism, but this can increase loneliness. Resentment and hyper-perseverance lead to suspicion, together with mistrust and negativism predict the increase of hostility index, and as a consequence - the victimization, which manifests itself in aggression directed inwards. People with secondary ASW angry at themselves for their inferiority and for the fact that they can't overcome their problems. The self-aggressive behaviour became widespread (scars, micro-cuts, suicide attempts), they become hostile to their parents and relatives, especially when they require to leave the apartments. All this reduces the ability to provide themselves with an adequate psychological protection, take care of their own safety. These persons are not aware of the fact that they become victims of violence repeatedly (re-victimization). Individuals with secondary acute withdrawal are intensely lonely, and have a lack of social support, lose the ability to maintain meaningful social bonds and close relationships through inferiority, vulnerability, fear and shame for their condition.

Patients with primary ASW have entirely different picture. The strongest link was the total number of traumatic events. The higher the number of traumatic events and the higher their impact on real life (as a consequence, traumatic stress in life), the higher the level of cyclothymia on the one hand, the index of hostility and suspicion on the other, which causes isolation from the aggressive environment. The high trauma index predicts higher levels of dysthymia (pessimism, isolation, decreased mood), the high dysthymia level predicts the low quality of life.

On the second place regarding significance was the characteristic of hyper perseverance, it was related to the quantitatively most significant characteristic of affectivity/exaltation. Such patients have a high plasticity, the speed of mental processes. They react intensively to any (even minor) events, falling at the same time into depression, then into the euphoric mood - from the gloomiest to the most dreamy and happy state. Even a small fear covers the whole nature of an exultant person. A public rating of their physical or other disadvantages is a primary stressor for this type; a common way to overcome stress is verbal hostility. But in combination with hyper perseverance, characterized by a tendency to experience strong feelings for a long time, including resentment, anger, fear, especially when they were not

Figure 1: Correlation graph (pleiades) for an experimental group without a diagnosis (EG2).

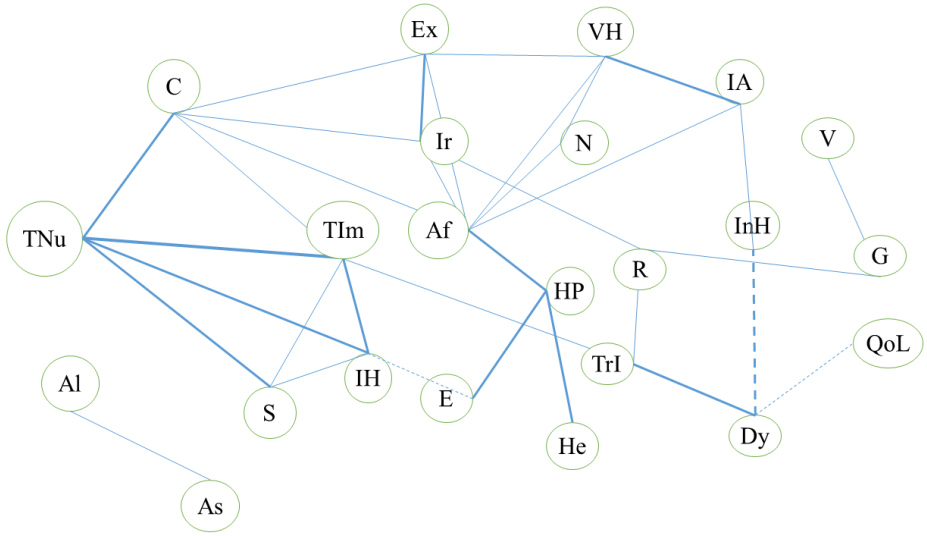
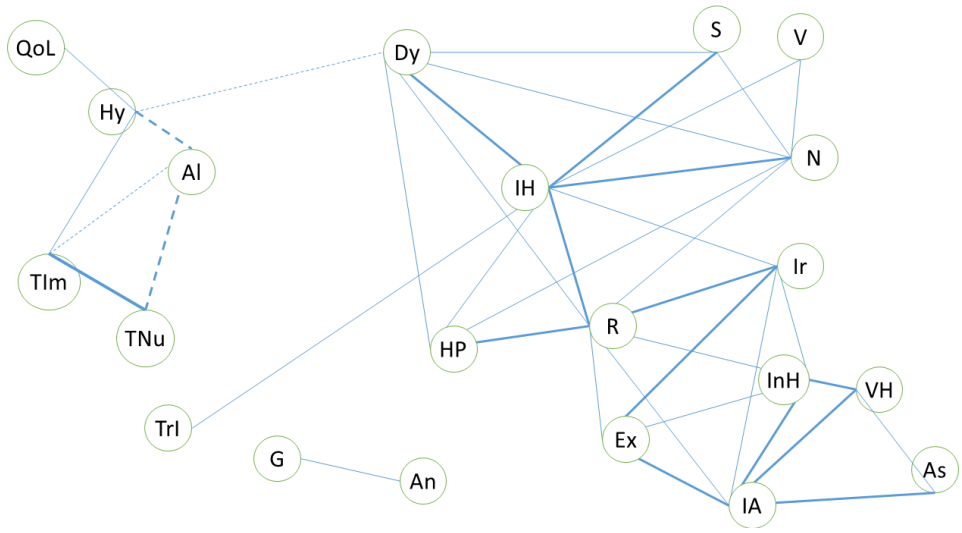


Figure 2: Correlation graph (pleiades) for an experimental group with a diagnosis (EG1)



expressed in real life because of any external circumstances (or high level of alexithymia), it would be observed a dysfunctional pattern of behaviour. These feelings can live for weeks, months, even years. Such patients have weakened self-control (irritability, excitability) as a result of the avoidance of problem and due to hyper-exactness (resistance to change), because it is difficult to switch to something new.

The affectivity/exaltation combined with cyclothymia, irritability, excitation, and negativism, as can be observed in Figure 1, lead to an increase in the index of aggressiveness due to verbal hostility. A typical way to deal with stress for a hyper-perseverance individual includes hostility, assault, suspicion, solitude, activities on their own, independent from other people. Patients with primary ASW profoundly and for a long-time experience life impressions, episodes of relations of both positive and negative content due to emotivism. Emotional shocks can strongly affect and cause depression, while the severity of depression corresponds to the severity of the event. Typical stressful situations leading to such reactions are the following: antisocial behaviour of others, roughness, callousness of others, indifference to the emotional state, absence of warm emotional bonds, illness or loss (physical and psychological) of close people. Traumatization changes traits of personality, shows more affectivity,

Table 5: Comparison of significant relationships in a group of socially withdraw people with and without a diagnosis (EG 1 and EG2).

No.	EG1		EG2	
	Feature	Number of sign. links	Feature	Number of sign. links
1	Index of hostility (IH)	8	Affectivity/Exaltation (Af)	7
2	Resentment (R)	8	Total impact of trauma (TIm)	5
3	Index of aggression (IA)	6	Cyclothymia (C)	5
4	Negativism (N)	6	Verbal Hostility (VH)	4
5	Dysthymia (Dy)	6	Excitability (Ex)	4
6	Indirect hostility (InH)	5	Index of hostility (IH)	4
7	Irritability (Ir)	5	Irritability (Ir)	4
8	Hyper perseverance (HP)	4	Total number of traumatic events (TNu)	4
9	Hyperthymia (Hy)	4	Dysthymia (Dy)	3
10	Excitability (Ex)	4	Hyper perseverance (HP)	3
11	Alexithymia (Al)	3	Index of aggression (IA)	3
12	Verbal Hostility (VH)	3	Resentment (R)	3
13	Suspicion (S)	3	Suspicion (S)	3
14	Total impact of trauma (TIm)	3	Trauma index (TrI)	3
15	Victimization (V)	2	Indirect hostility (InH)	2
16	Assault (As)	2	Negativism (N)	2
17	Total number of traumatic events (TNu)	2	Guilt (G)	2
18	Guilt (G)	1	Emotivity (E)	2
19	Trauma index (TrI)	1	Alexithymia (Al)	1
20	Anxiety (An)	1	Victimization (V)	1
21	Quality of life (QoL)	1	Hyper-exactness (He)	1
22			Quality of life (QoL)	1
23			Assault (As)	1

cyclothymia, hyper-perseverance, and hyper-exactness.

Upon studying the antecedents of the manifestation of acute social isolation, it was found that the biopsychosocial approach gives a most comprehensive answer to isolation development. Biological factors comprise of temperament features (e.g., shyness), psychological factors involve difficulties in school, such as bullying, the experience of physical and emotional violence by peers, or a sense of failure at their workplace. The social factors include an overprotective style in dysfunctional families [11].

The psychological path of acute social isolation development relies on the theory of attachment [12]. According to the objective external cause (death of a loved one, separation), the root of chronic emotional loneliness is a violation of attachment style formation. Avoidant attachment further manifests itself in externalization (e.g., aggression, behavioural problems), as well as internalization (e.g., social anxiety, psychosomatic complaints), behavioural disturbances throughout childhood and adolescence [13]. In the cases of ambivalent or avoidant attachment style from childhood, it is difficult to find a partner capable of satisfying his social need for attachment and/or to build a stable relationship with such a potential partner. Children with an avoidant attachment style face a steady avoidance of emotional intimacy, rejection by parents, which are unable to provide children with a sense of security. Moreover, in a situation of environmental investigation, the child continually faces an inconsistent and unpredictable reaction of parents (ambivalent attachment) [14].

Social isolation aims to protect fragile self-esteem. Loneliness is also associated with an underestimation of self and self-blame in situations of social failures. Social interaction is the central source of feedback from others and forms a self-image, some people with low self-esteem choose dysfunctional interpersonal strategies because of the desire to minimize the risks of negative feedback. Withdrawal from society and the departure of interpersonal relations is protecting from the threat of criticism or impairment, eliminating social contacts in general. Thus, it is essential to understand that the motivation to avoid threatening feedback may be stronger than motivation to restore social relationships [15].

5 Conclusion

Therefore, in this study, the psychopathological features of patients with ASW were determined in comparison with healthy control group. It was confirmed that the patients with primary ASW differ from patients with secondary ASW regarding antecedents of this behaviour.

6 Additional information

6.1 Competing interests

The author declares that no competing interests exist.

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Table 6: Inclusion/exclusion criteria for acute social withdrawal (from Teo A.R. et al., 2015 [16]).

No.	Question (item)	Yes	No
1	Do you currently spend most of the day and nearly every day at home? If 'YES,' when did it start?		
2	Have you ever in the past spent most of the day and nearly every day at home? If 'YES,' when did the longest past period start and end?		
If 1 is 'NO' and 2 is 'NO' mark 'Ineligible.' If symptoms occurred less than 6 months ago and duration is less than 6 months, mark 'Ineligible' in Step 2.			
3	Do you currently avoid social situations, such as attending school or going to a workplace? If 'YES,' what are a couple (two) examples? When did it start?		
4	Have you ever in the past avoided social situations? If 'YES,' when did the longest past period start and end?		
If 3 is 'NO' and 4 is 'NO,' mark 'Ineligible.' If started less than 6 months ago and longest period is less than 6 months, mark 'Ineligible.'			
5	Do you currently avoid social relationships, such as friendships or contact with family members? If 'YES,' what are a couple (two) examples? When did it start?		
6	Have you ever in the past avoided social relationships? If yes, when did the longest past period start and end?		
If 5 is 'NO' and 6 is 'NO' mark 'Ineligible.' If started less than 6 months ago and longest period is less than 6 months, mark 'Ineligible.'			
7	Considering your most severe period of social isolation, (did/does) it do any of the following: a) interfere significantly with your normal routine; b) interfere significantly with your ability to work or attend school; c) interfere significantly with social activities or relationships; or d) bother you a lot?		
If NO, mark 'Ineligible.'			
8	Briefly, what is/was the reason you started being socially isolated?		
If all episodes due to a chronic physical illness or injury, mark 'Ineligible.'			
9	Do you have a history or have you been told you have any of the following conditions: Schizophrenia, Dementia (any type), Mental Retardation, Asperger Syndrome, Autistic Disorder (Autism).		
If any of the above conditions checked, mark 'Ineligible.'			