Relationship between Impulsivity and Coping Strategies among Psychiatric Outpatients at Assiut University Hospital

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Abstract: Routine assessment of impulsivity and accompanying coping skills is essential for planning care and appropriate management of patients identified as impulsive. Impulsivity is one of the defining characteristics of many adult psychiatric disorders and is also a key component in the clinical risk assessment of anger and aggression. This study aimed to assess the impulsivity and coping skills among psychiatric patients and to determine the relationship between impulsivity and coping skills. The study was carried out in psychiatric outpatient clinic at Assiut University Hospital. The study sample comprised 120 psychiatric patients (70 males) and (50 females), diagnosed with schizophrenia, mood disorders and delusional disorder. Three tools were used for data collection, namely: Patient's assessment structured interview schedule, Impulsivity scale, and Coping scale. the main results yielded by the study proved that, concerning the level of impulsivity , the majority sample had moderate impulsivity, highest among patient's aged from 30–39 years, males than females (51%), married, illiterate (33%), and farmers (32%). The study recommended teaching nurses to understanding the effect of impulsivity on personality, behavior and coping strategies is essential for the accurate assessment and appropriate management of impulsive individuals. [Samia Abed Dayem, Naglaa Abd El megied Mohamed and Nadia Abd Elghanay Abd El Hammed **Relationship between Impulsivity and Coping Strategies among Psychiatric Outpatients at Assiut University Hospital.** Journal of American Science 2011;7(3):552-557]. (ISSN: 1545-1003). http://www.americanscience.org.

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1. Introduction:

Impulsivity among psychiatric patients appears to be a growing problem and is a subject of importance and concern to clinicians and researchers. Impulsivity has highlighted the importance of the defining characteristics on various psychiatric disorders and is a key component in the clinical risk assessment of anger and aggression (1)

Impulsivity seems to be a basic part of some psychiatric disorders such as personality disorder, conduct disorder, aggression, bipolar disorder, suicidal behavior, attention deficit, hyperactivity disorder and psychoactive substances **([2]).**

Subjects with a history of suicide attempts have impulsive errors on the immediate memory tasks and had shorter response latencies especially for impulsive responses **([3])**. Respectively impulsive behavior is a central feature of many psychiatric disorders which can affect personality, behavior and coping abilities of the clients .It is essential for accurate assessment and appropriate management of impulsive individual **([1]).**

Impulse – control disorders are characterized by failure to resist an impulse, derive or temptation to perform an act that is harmful to the person or to others. The individual feels an increasing sense of tension, or arousal before committing the act, and then experiences pleasure, gratification or relief at the time of committing the act **([4])**.

Coping defined as constantly changing cognitive and behavioral efforts to manage specific external and / or internal demands that are appraised as taxing or exceeding the resources of the person **([5])**. Patients who have not developed healthy coping responses are vulnerable and at high risk of continuing to react to stressful events in destructive ways. Using an appropriate coping measurement can help impulsive patients to identify and monitor feelings and become more attuned to triggers that signal the onset of impulsive behavior. Therefore, it is important for patients to know that they are capable of controlling their behaviors. If impulsive patients acquire essential and effective coping skills, this will lead to healthier life styles, decreased hospitalizations and improved quality of life **([1]).**

As nurses are the key persons in giving care for patients with impulsivity , it is important to know ways of coping skills during assessing patients to cope with their impulsivity , develop self – controlling , seeking social support , accepting their responsibility and able to problem solving **([1])**. The aim of the study was to assess the impulsivity and coping strategies and to determine the relationship between impulsivity and coping skills among psychiatric patients.

2. Materials and Methods

Materials

Research design:

The design followed for this study is a descriptive correlational design.

Setting:

The study was conducted at psychiatric outpatient clinic at Assiut University hospital. The hospital is serving Assiut City and all Upper Egypt governorates.

Subjects:

Subjects of the study comprised all psychiatric patients attending to outpatient psychiatric clinic within a period of four months from March to June 2010 which included: patients diagnosed with schizophrenia, mood disorders, and delusional disorder, both sexes and agree to participate in the study. The study subjects mounted to 120 patients (70 males and 50 females).

Tools of the study:

Three tools were used for data collection:

1- Tool (1): Psychiatric Patient's Sociodemographic Data Structured Interview **schedules:** This interview schedule developed by the researchers included the sociodemographic data of the study subjects such as age, sex, occupation, marital status, education and diagnosis.

2- Tool (2): Impulsivity scale:

It was developed by Barratt (2000) ([6]). It comprises 30 items used to measure impulsive personality traits. It is divided into two order factors, the first order factors contain 6 factors as attention (5 items) , motor (7 items) , self – control (5 items) cognitive complexity (5 items) perseverance (4 items) and cognitive instability (3 items) .The second order factors contain 3 factors as attention (5 items) motor (11 items) and non planning (11 items). The scale is a four points likert type. The rate in each statement ranged from 1 (rarely/never) 2 (occasionally) 3 (often) to 4 (almost always/always).A total score is obtained by summing the first or second – order factors. A higher summed score for all items indicate higher levels of impulsivity. The degree of impulsivity was categorized according to the following scores: low impulsive ranges from 30 to 59, moderate impulsive ranges from 60 to 89, and severe impulsive ranges from 90 to 120.

3 – Tool (3): Coping scale it was developed by Jalowiec and Powers (1988)

This scale is used to measure coping strategies, which composed of:

A – Problem – oriented coping strategies, which primarily aimed at solving problems or handling stressful situations. There are classified into 2 factors:

Factor 1: active role of coping strategies (10) items.

Factor 2: passive role of coping strategies (6) items.

B- Affective – oriented coping strategies, which is used to manage emotions accompanying stressful situations, and they are classified into 5 factors:

Factor 1: coping strategies related to withdrawal (7) items.

Factor 2: coping strategies related to projection and displacement (5) items.

Factor 3: coping strategies related to neurotic reactions (4) items.

Factor 4: coping strategies related to daydream and fantasy (3) items.

Factor 5: coping strategies related to resign the self to the fate (5) items.

This scale is a five point likert scale with response options of always (5), often (4), about half the time (3), occasionally (2), never (1). A high score indicates greater use of that particular coping strategy. Al – Mahdy ([7]) translated it and established content validity and reliability of the Arabic version of this tool.

Methods:

1-An official permission was obtained from the dean of Faculty of Nursing – Assiut University and from the hospital director to the head of Psychiatric Department at Assiut University Hospital.

2-Tool two translated into Arabic language. Both the Arabic and English items were submitted to five experts from the English section, Faculty of Art, Assiut University to be reviewed for its translation. A jury of five experts in the psychiatric field examined the content validity. Reliability done by using Crombach alpha coefficient, it was 0.98.

3-Explanation the purpose of the study for patients before starting data collection.

4-Each patient has been interviewed once on an individual basis at outpatient psychiatric clinic (the outpatient clinic worked three times /week)

5-The patient was oral informed consent about the aim of the study and ensured about the confidentiality and privacy for them.

6-The data were collected by the researchers during the period of four months from the first of March to the end of June 2010.

7-The patient was interviewed for about 30 – 45 minutes at one time.

Statistical analysis

The data were computerized and verified using the SPSS (statistical package for social science) version 11.5 to perform tabulation and statistical analysis. Data were presented using descriptive statistics in the form of numbers and percentages. Qualitative variables were compared using chi – square test (X^2) and quantitative variables were compared by using the ANOVA (F - test). Statistical significance was considered at p – value <0.05.

3. Results:

Results of the present study showed that:

In the present study, 37.5% of the studied group was in the age group 30-39 yrs. While 28.33% of them were less than 30 yrs and small percentage of them (10.83%) were 50 yrs and more. The mean age regarding studied group were averaged 35.82 ± 9.26 years. As regard sex, 58.33 % of the studied groups were men (Table1).

Regarding educational level, 37.5% of the studied groups were illiterate. According to marital statues, nearly half of the studied groups were married, 36.66% were farmers and 23.33% of them were unemployed. As regard diagnosis, 42.5% of the studied groups were diagnosed schizophrenia and 25.82% of them were mania, while 23.33% and 8.33% of the studied groups were depression and paranoid, respectively.

Moderate impulsivity was recorded in 88.33 %, low impulsivity in 8.33%, while severe impulsivity was recorded only in 3.33% (Table 2).

Table (3) shows the correlation between impulsivity and coping. There was a highly significant differences between different coping strategies and impulsivity, while active role in coping strategies only significant which increased when the impulsivity decreased.

Table (4) shows the relationship between the level of impulsivity and coping strategies. It can be observed that impulsive patients more used of projection as a coping skills (F= 20.80, P = 0.01).

Table (5) shows the relation between the level of impulsivity and coping strategies. As regards diagnosis, there was a significant differences were present between level of impulsivity and coping strategies among schizophrenic disorders were had moderate impulsivity that used neurotic reaction (p= 0.007), dream and fantasy (p=0.016), resign self (p= 0.001) and passive role (p=0.023) as a methods of coping skills than other diagnosis.

Table (1) Demographic characteristics of the studied patients.

Characteristic of studied group	Frequency (No = 120)	Percent (%)
Age :-		
- (≤30 yrs)	**34**	**28.33**
- 30 yrs	**45**	**37.5**
- 40 yrs	**28**	**23.33**
-(≥50 yrs)	**13**	**10.83**
Mean ± SD	**35.82 ± 9.26**	
sex :-		
Males	**70**	**58.33**
Females	**50**	**41.67**
Education :-		
- Illiterate	**45**	**37.5**
- Read & write	**14**	**11.66**
- Primary school	**19**	**15.83**
- Prep school	**2**	**1.66**
- Secondary school	**25**	**20.83**
- University	**15**	**12.5**
Marital statues :-		
- Single	**49**	**40.83**
- Married	**59**	**49.17**
- Divorced	**5**	**4.16**
- Widow / Separated	**7**	**5.83**
Occupation :-		
- Unemployed	**28**	**23.33**
- Worker	**23**	**19.16**
- Farmer	**44**	**36.66**
- Student	**13**	**10.83**
- Professionals	**12**	**10**
Diagnosis:-		
- Schizophrenia	**51**	**42.5**
- Mania	**31**	**25.82**
- Depression	**28**	**23.33**
- Delusional disorder	**10**	**8.33**

Table (2): Level of impulsivity among the studied group.

Level of impulsivity	Studied group (N=120)	
	NO	%
- **Low impulsive**	**10**	**8.33**
- **Moderate impulsive**	**106**	**88.33**
- **Severe impulsive**	**4**	**3.33**
Total	**120**	**100%**

Table (3): Correlation between impulsivity and coping scale

Coping scale	Impulsivity	
	r	P
Withdrawal	0.48	**
Projection	0.59	**
Neurotic reaction	0.43	**
Dream &fantasy	0.46	**
Resign self	0.25	**
Active – role	-0.21	*
Passive – role	0.28	**

* P= 0.05 Significant ** P = 0.01 highly significant

Table (4) Relationship between level of impulsivity and coping strategies among studied group

Coping strategies	Level of impulsivity (Mean ± SD)			F- value	Signif.
	Low level (n= 20)	Moderate level (n=76)	High level (n=24)		
Withdrawal	15.80± 3.52	18.41± 4.52	23.21±3.59	18.60	**
Projection	8.80±2.63	11.82±4.19	16.38±4.22	20.80	**
Neurotic reaction	8.45±3.78	1.62±3.71	13.92±2.72	12.97	**
Dream &fantasy	7.00±2.34	8.42±2.57	11.13±2.56	15.95	**
Resign self	10.15±2.11	12.36±3.25	13.33±3.43	5.94	**
Active – role	26.65±9.22	23.91±7.39	20.50±5.32	3.90	*
Passive – role	14.40±4.68	14.67±3.36	17.13±3.54	4.60	*

* P= 0.05 Significant ** P = 0.01 highly significant

Table (5) Relation between level of impulsivity and coping strategies in relation to diagnosis.

Coping strategies	Level of impulsivity	Diagnosis								CHI	Sign.
		Schizophrenia		Mania		Depression		Paranoid			
		No	%	No	%	No	%	No	%		
Withdrawal	Low	7	5.83	7	5.83	7	5.83	0	0.00	8.64	0.373
	Moderate	31	25.83	20	16.67	18	15.00	9	7.50		
	severe	13	10.83	4	3.33	3	2.50	1	0.83		
Projection	Low	8	6.67	9	7.50	9	7.50	1	0.83	12.25	0.14
	Moderate	35	29.17	14	11.67	16	13.33	6	5.00		
	severe	8	6.67	8	6.67	3	2.50	3	2..50		
Neurotic reaction	Low	12	10	12	10.00	7	5.83	3	2.50	21.05	0.007**
	Moderate	33	27.50	16	13.33	8	6.67	6	5.00		
	severe	6	5	3	2.50	13	10.83	1	0.83		
Dream& fantasy	Low	8	6.67	9	7.50	11	9.17	3	2.50	18.74	0.016*
	Moderate	22	18.33	17	14.17	15	12.50	5	4.17		
	severe	21	17.50	5	4.17	2	1.67	2	1.67		
Resign self	Low	7	5.83	10	8.33	1	0.83	5	4.17	24.49	0.001**
	Moderate	39	32.50	18	15.00	19	15.83	4	3.33		
	severe	5	4.17	3	2.50	8	6.67	1	0.83		
Active-role	Low	11	9.17	7	5.83	3	2.50	1	0.83	8	0.433
	Moderate	28	23.33	19	15.83	21	17.50	7	5.83		
	severe	12	10	5	4.17	4	3.33	2	1.67		
Passive-role	Low	3	2.50	3	2.50	10	8.33	4	3.33	17.7	0.023*
	Moderate	45	37.50	25	20.83	16	13.33	5	4.17		
	severe	3	2.50	3	2.50	2	1	1	.83		

4. Discussion:

Impulsivity has been defined as a predisposition toward unplanned reactions to internal or external stimuli, without regard to the negative consequences, which more common in some mental disorders **([8]).** Individuals with mental illness may have difficulty appraising stressful events as well as deficient cognitive and behavioral strategies necessary to manage stress., if unsuccessful in coping with a stressful events , impulsive behaviors may emerge , so it is a way of impulsive individuals can cope with difficult or crisis situations **([1]).**

The present study aimed to assess the impulsivity and coping skills among psychiatric patients and to determine the relationship between impulsivity and coping skills. The highest percentage of the studied patients were in the age group from 30 to 39 years old , males than females , married than single , patients with low level of education (illiterate) and farmers . This result consistent with other studies **([9-10])** who stated that the impulsivity levels in males have a higher propensity than females, 42 % had low education and 54 % were unemployed and farmers, while 42 % of the studied sample had never been married. **Petry ([11])** found that the impulsivity levels were a highly common among the age of adolescence. Some studies does not go with the findings of **Petry ([11])** who stated that women with high impulsive were less likely to delay gratification during are ward for performance task and were likely to respond aggressively toward individuals whom they perceived as being in their way.

In relation to impulsivity and coping strategies, the present study found that the impulsive patients were highly using of emotional – oriented coping strategies as projection than problem – oriented coping strategies. This is accordance with **Nagata *et al*., ([12]),** who stated that impulsive patients with bulimia nervosa had significantly higher of emotional coping scores than problem coping scores. Also, the findings of **Lightsey and Hulsely ([13])** found that a high positive correlation between ineffective coping strategies among the pathological gamblers and problem that the emotional coping conjunction with high impulsivity.

Concerning diagnosis as a factor in coping methods, there were a significant differences between the level of impulsivity and coping strategies among schizophrenic patients were highly used of emotional – oriented coping strategies than problem – oriented coping strategies. This finding consistent with the study of **Nagata *et al*.,** ([12]), who stated that, the highest levels of impulsivity were found among schizophrenic patients. This finding is also goes with **Dervaux *et al.*, ([14]),** who stated that impulsivity associated with substance abuse among individuals with schizophrenia or schizoaffective disorder. **Lancu *et al.*, ([15])** found that high impulsivity in schizophrenic patients is significantly etiology of suicide in schizophrenia. Also this consistent with the findings of **Mohamed Agoub, ([16]).** He showed that high levels of impulsivity were found among schizophrenic patients. Clearly, impulsivity is a personality trait of importance not only among psychiatric patients, but in the general population as well.

5. Conclusion:

Based upon the study results, it is concluded that the majority of sample had moderate level of impulsivity , and more in age groups from 30 – 39 years old , males than in females , married than single/ separated , low educational levels (illiterate) and in farmers than other occupations . Highest in schizophrenic disorders than other diagnosis, patients were used emotional - coping strategies than problem – oriented coping style.

Recommendations

In the light of the study findings, it is recommended to:

- Teach nurses to understanding the effect of impulsivity on personality, behavior and coping strategies is essential for the accurate assessment and appropriate management of impulsive individuals.
- Using an appropriate coping measurement can help nurses and patients identify specific coping styles and strategies.
- Nurses can help patients identify and monitor their feelings and become more attuned to triggers that signal the onset of impulsive behavior.
- Encourage patients to know they are capable of controlling their behaviors.
- Routine assessment of impulsivity and accompanying coping skills is critical for planning care of patients identified as impulsive.

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