Relation of Assertive Behavior, Hope Feeling, and Recovery for Patients with Schizophrenia

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Abstract

Early-stage schizophrenia patients are already more prone to feel inadequate, and less aware of their own aims and assertive conduct. They are also more likely to feel pessimistic about the future. **The study *aimed*** to explore the relation of assertive behavior, hope feeling, and recovery for patients with schizophrenia. ***Design:*** a correlational descriptive research design was used. ***Study subjects***: A convenience sample of 100 patients involved in the study. ***Three tools*** were used: ***Tool I part1*****:** A structured interview schedule include socio-demographic & clinical characteristics of patients. ***part2*****:** Assertiveness inventory. ***Tool II:*** The Herth Hope Index 12 items (HHI). ***Tool III*****:** The Recovery Assessment Scale (RAS). ***The result;*** Most of patients have low total recovery levels, two thirds of them have a little assertiveness level and majority of them have higher hope level. ***Conclusion***: Hope levels and recovery have an extremely negative statistically significant correlation and there is no statistically significant link between a patient's assertiveness and recovery level**.** ***The study recommended*** that all psychotic patients in hospitals should participate in an assertiveness skill training program.

Keywords**:** Assertive behavior, Hope, Recovery, Schizophrenia.

Introduction

The cognitive and affective processes are significant impairments in a lifelong psychiatric illness and characterized patients with Schizophrenia. This impairment appears in the form of interruption with reality, hallucinations, delusions, difficulty in thinking and concentrating, lack of incentive, social departure, trouble expressing emotions,, troublemaking or abnormal behavior, and difficulty in working normally [(1)].

Patients with schizophrenia tend to experience shame and discrimination from stigma that influence their hope during recovery. The ongoing progression of change that enables individuals to enhance their health, well-being, and live independently along the journey of reaching their potential is called recovery [(2)]. Disturbance in one's approach to life and disease, with the concentration on optimism and the founding of a significant life refers to personal recovery [(3)]. Persons are inherently experiences recovery and it can be difficult and, however, there are a wide range of potential recovery contexts [(4)] .

The gradual process of recovery that is unique for each person is differs from person to person. While symptoms are treatable, not always mean "cure" or a whole withdrawal of symptoms. The main objective of recovery is helping relative reintegrate into the society, and get back to normal living [(5)].

Recovery is made possible by having a harmless space to be themselves for patients, and to discover friends, family and peers who know and understand their experiences. It is about hope, and it is a drive towards a fresh lifespan that better reflects patients' individuality, needs and deepest desires. Recovery can bring precious and unexpected gifts [(6)]. And in the beginning phase of recovery are more likely to experience impossibility about the future, powerlessness, a damage of self and

diminished awareness of personally valued goals [7].

Multiple causes, as: the flora and strictness of mental symptoms, social factors as societal linkage and work, and one's own experience of recovery, reflecting hope, individuality and meaning influence the recovery process in mental health. it varies through individuals and time [4] . In emotional health, the focus is on medical recovery, pointing to minimize clinical symptoms. However, social recovery which means regaining work functioning, interactional relationships, also reestablish their health [8].

The drive of recovery which identifies the ability of people with psychotic illnesses to share in the normal life of community is from a convergence of factors, showing that many people eventually improve from severe psychotic illness. The enhanced focus on reestablishing working for individuals with mental illnesses appears from the occurrence and progress of the recovery movement [9].

Positive response to therapy and adaptation to therapy in the schizophrenic patients is associated with hope. Hope can stimulate the schizophrenic patients to engage in therapy and to promote recovery. It ameliorates depression, anxiety, well-being, coping and immunity [10].

Hope is a powerful force that can create a sense of expectation and optimism concerning life. It can help a person acknowledge and use his or her resources to achieve goals. Accepting that there is a problem, trying to make changes, and emphasizing strengths rather than inadequacies are all signs of hope. The benefits of treatment seem to be substantial – reducing symptoms, improving social functioning, and having a better quality of life [10].

The way of interactive needs, moods or privileges to others while being polite, and balancing own needs and rights with the needs and rights of others is an interactional skill called assertiveness. Presence of confident is dangerous if a patient not tolerate this relationship, so always consider this carefully [11]. Assertive persons take action that reflects the best interest for them including standing for oneself without substantial anxiety, expressing one's feelings comfortably, or exercising one's own rights without denying the rights of others. Consequently, unassertive behavior reflects individuals' difficulties in standing up for them-selves, expressing their wants or needs, thinking, and moods [12] .

Patients who diagnosed as schizophrenia and have difficulty in acting assertively lack the ability to perform their daily life skills and social roles, to communicate effectively with their families and environments, to express their feelings and thoughts, to resolve their individual difficulties effectively, to make requests, to reject others' irrational demands, and don't able to act in situations that require social interaction. Lacking of these assertive skills leads to deterioration in the functioning levels of patients [13] .

Patients are effectually incapable to communicate their thinking and affect because they experience cognitive disturbances. Also those patients have problems with relational interaction and the interpersonal struggles which arise defeat, worry, sadness and annoyance, are frequently sense helpless to aid. Lack of assertiveness is the origin cause of this problem among schizophrenic patients, or the incapacity to express worry or to attain suitable, outgoing relations with not upsetting others [14].

The vital elements of societal impairments in schizophrenic patients are shortages in assertiveness skills. Studies revealed that schizophrenic patients had huge practical impairments across a wide range of assertiveness skills. For example, interactive investigation of schizophrenic patients'

connections revealed that they are losing the capability to join in active societal connections, do demand, explore their thoughts, approve and explore their feelings, understand interpersonal boundaries and respond assertively to different situations which delay their recovery [15,16].

Significance of the study

The researchers observed throughout the clinical expertise that a significant number of patients with a schizophrenia have communication issues and struggle with assertiveness. Those are incapable to convey their daily tasks and social responsibilities, interact effectually with their relatives and context, communicate their affect and thinking, and act appropriately in social situations. The majority of schizophrenia patients feel hopeless for a variety of reasons, such as therapeutic challenges, societal stigma, inability to get married, and lack of social support. In adding to this, the best significant cause that leads to recovery is a hope. Therefore, the focus of this research is to explore the relation of assertive behavior, hope feeling, and recovery for patients with schizophrenia.

Aim of the study: was to explore the relation of assertive behavior and hope feeling with recovery for patients with schizophrenia.

Research questions

- What is the level of assertive behavior?
- What is the level ofassertive behavior among patient with schizophrenia?
- What is the level of hope feeling among patients with schizophrenia?
- What is the level of recovery among patients with schizophrenia?
- What is the relation of the assertive behavior, hope feeling and recovery for patients with schizophrenia?

Subjects and methods

Design

A correlational descriptive research design utilized in the study.

Setting

The study was conducted at both inpatient and outpatient services of Neuropsychiatric Department of Tanta University Hospital. Tanta University Hospital is affiliated to ―Ministry of High Education‖. The capacity of the Neuropsychiatric Department is (31) beds divided into two wards for male patients (17 beds) and two wards for female patients (14beds)

Subjects

A convenience sample of (100) patients with schizophrenia selected according to the EpiInfo software statistical package was included in the study. The criteria used for sample size calculation were as follows: a confidence level of95% and70% expected outcome with margin of error: 5% the sample size based on the previously mentioned criteria should be N >92 and increased to 100 patients for effective reliability.

The participants had the **following criteria**:

-Adult patients (18 years and above).

- Patients willing to participate in the study.

- Both sexs

Exclusion Criteria

-Patients with mental retardation.

-Co-morbid diagnosis of psychiatric disorder (e.g. Personality disorders and substance dependence).

-Acute stage of schizophrenia.

Tools

The data was collected by using the following tools:-

Tool I: It consists of 2 parts

Part 1: Structured interview schedule include Socio-demographic characteristics of patients developed by the researchers such as: age, sex, educational levels, occupation, residence, and **clinical data about patients** include: duration of disease, presence of schizophrenia in the family, frequency of admission to the hospital,

and previous history of the schizophrenia.

Part 2: Assertiveness inventory, which was originally developed by **Alberti and Emmons (1986)** [17] to assess level of assertiveness. The inventory consists of 17 items. Each item is answered on a five point Likert. **0** = no or never; **1** = somewhat or sometimes; **2** = average; **3** = usually or a good deal: **4** = practically always or entirely

Scoring system

The scale range from 0 to 68

0 to 17 not at all assertive

17 to 34 a little assertiveness

34 to 51 very assertive

More than 51 complete assertiveness

Tool II: The Herth Hope Index 12 items (HHI), this scale was developed by Herth, (**Herth K. 1992**) [18] to assess the hope level of patients, it is consisted of 12 items which are rated on a four point's likert-scale. The individuals responses ranging from "1" strongly disagree to "4" strongly agree. **The items 3, 6 are reversed** responses in their score.

The instrument contains three classifications:

1- **Temporality & future** (questions numbers 1, 2, 6, 11),

2- Positive readiness & expectancy (questions numbers 4, 7, 10, 12) and finally

3- **Interconnectedness with self and others** (questions numbers 3, 5, 8, 9). The HHI is reliable with a strong internal consistency as the Cronbach alpha for the total scale was α=0.78

Scoring system

The total score obtained by summing items. It ranges from 12 to 48, with higher score denote to a higher level of hope.

-12-<24 lower level of hope

-24-48 higher level of hope

Tool III: Recovery Assessment Scale (RAS), is an instrument measuring personal recovery by self-report, it was developed by **Giffort and colleagues**, **1995** [19]. The RAS-R consists of 24 items on five-level scales ('Strongly Disagree',1 'Disagree',2 'Not Sure', 3'Agree',4 'Strongly Agree'5) .These items can be added up to produce summary scales representing five dimensions of personal recovery:

1-Personal confidence and hope (items 7, 8, 9, 10, 11, 12, 13, 14 & 21),

2-Willingness to ask for help (items 18, 19 & 20),

3-Goal and success orientation (items 1, 2, 3, 4 & 5),

4-Reliance on others (items 6, 22, 23 & 24),

5-Not dominated by symptoms (items 15, 16 & 17),

Total scores ranged from 1 to 120, where higher scores indicated a high recovery level

Scoring system

<70% Low recovery

≥ 70% High recovery

Method

This study was established based on the following stages

1. The official letter was attained from the Dean of the Faculty of Nursing to the director of the neuropsychiatric department at Tanta University Hospital to obtain their permission for collection of the data.
2. **Ethical considerations**

- The researchers get the approval of the scientific research of Ethical Committee of the Faculty of Nursing at Tanta University.

-Informed consent was obtained by the researchers from the patients after explanation the purpose of the study.

-Patients will be assured about the confidentiality of data and the privacy of patients will be respected .

-Respecting the right of the patients to withdraw at any time during the data collection period.

-The study caused no harm or pain to the patients.

3. Tools of the study (I part 2, II , III,) translated by the researcher into Arabic language, and tested for content validity by a jury of 5 experts in psychiatric nursing. And the required corrections were carried out accordingly

4. The reliability of the study tools using Cronbach's alph check found to be 0,912, 0,785 and 0,873 respectively for tool I part 2, tool 2 and tool 3 which represented highly reliable tools.

5. 10% of patients with schizophrenia tested as a pilot study to identify the barriers & problems, and to test the tools for clarity.

6. ***Data collection procedure***

- After getting the approval to carry out the research from the appropriate authorities, the researchers reviewed the patients' records and select the patients who met the inclusion criteria.
- These patients were invited to participate in the study after being informed about nature of the study, and the researcher collected the data through face to face interview with each patient on an individual basis to assess the level of patients' assertiveness, the level of hope and the level of recovery.
- The researcher met the patients within range of three to four days per week, the number of the patients every day range from 2 to 6 patients and the time required to complete the data collection sheet take a time of 45 to 90 minute according to condition of the patients' tolerability to answer the questions and presenting symptoms. The duration of data collection was four months, starting from 1st February to the end of May 2022.

Statistical analysis

The SPSS statistical computer tool version 26 was used to arrange, tabulate, and statistically analyses the acquired data. The range, mean, and standard deviation were computed for quantitative data. Using the Chi-square test ($\chi 2$), comparisons for qualitative data were made.

The Pearson and Spearman correlation coefficient (r) was used to assess the relationship between the variables. $P<0.05$ was used as the threshold for significance for interpreting the results of tests of significance (*).

Results

Table 1 clarifies percent distribution of patients with schizophrenia by socio–demographic characteristics. Regarding the age; one third of patients (35%) aged 35 to less than 50 years old, (23%) of them aged 20 to less than 35 years old and 0.5% of them aged more than 65 years old with rang ((16-73) and Mean ± SD (37.84±15.231).

In relation to gender; (60%) of them were male and (40%) of them were female. For marital status; more than one third (46%) of patients were married, 44% are single, and minority of them (4%) were widow. It is founded that (41%) of patients had secondary school while the minority of them had post-graduate education (6%).

Regarding occupation; (55%) of studied patients were not working and (45%) of them20 to less than 35 years old and 0.5% of them aged more than 65 years old with rang ((16-73) and Mean ± SD (37.84±15.231).

In relation to gender; (60%) of them were male and (40%) of them were female. For marital status; more than one third (46%) of patients were married, 44% are single, and minority of them (4%) were widow. It is founded that (41%) of patients had secondary school while the minority of them had post-graduate education (6%). Regarding occupation; (55%) of studied patients were not working and (45%) of them were working. In relation to the residence; (47%) of them were living in city while (53%) of them was living in village. As regards to income; the majority of them (74%)

mentioned they had sufficient income while (26%) of them mentioned they had not sufficient income.

Table 2 clarifies the clinical characteristics of the studied patients. In relation to duration of disease, (63%) of patients had duration of illness less than five years, and 14% of them had duration of illness from 5 to ten years. it was found that 63 of the studied patients had no family history of schizophrenia, while 37 % of them had family history of schizophrenia.

As regards to the last time of psychiatric hospitalization of studied patients; (48) of studied patients were admitted for less than 6 month while (14%) of them were admitted from six month to one year.

Figure 1 illustrates percent distribution of the studied patients with schizophrenia according to total assertiveness inventory level .It shows that two thirds of the studied patients (60%) have a little assertiveness level, and the minorities (1%) of them have complete assertiveness.

Figure 2 denotes percent distribution of the studied patients with schizophrenia according to the total hope level. It shows that the majority (80%) of the studied patients have higher hope level, while one quarter (20%) of them have lower hope level.

Figure 3 illustrates percent distribution of the studied patients with schizophrenia according to the total recovery level. It shows that most (89%) of the studied patients had low total recovery levels, while minority (11%) of them had high total recovery level.

Table 3 illustrates percent distribution, mean and stander division of the studied patients with schizophrenia by the assertiveness inventory level. It shows that 60% of the studied patients had a little assertiveness level, and the minorities (1%) of them had complete assertiveness. Also, the table indicate that the Mean ± SD of assertiveness level of study patients 26.98±9.306, that mean the patients had a little assertiveness level.

Table 4 determines the total mean scores of Herth Hope Index (HHI) dimensions among the studied patients with schizophrenia. It shows that the studied patients had high percentage of positive readiness and expectancy (82.17%) of hope with the Mean ± SD = 9.86 ± 1.602. The total means score of HHI dimensions= 28.97 ± 5.540 that mean the patients' level of hope was higher.

Table 5 presents the total mean scores of recovery dimensions among the studied patients with schizophrenia. The total recovery mean score of the patient with schizophrenia was 69.37±16.351 that mean the level of recovery among them were low. It was observed that Mean ± SD = 9.15±2.754 of patients' willingness to ask for help with a mean percentage of 61%. On the other hand, the mean percentage of patient's reliance on others was 55.10 % with a Mean ± SD = 11.02±3.954.

Table 6 represents the relation between total levels of assertiveness inventory, recovery and hope of patients with schizophrenia. It's obvious that there is highly negative statistical significant correlation between hope level and recovery level where r= -0.565, p- value = 0.000. While there is no statistical significant correlation between the patient's level of assertiveness and their recovery level at r= 0.008, p-value = 0.935.

Table 7 illustrates the relation of the socio–demographic characteristics of the studied patients with the total assertiveness inventory, Hope and recovery score. This table shows that there is a positive statistical significant correlation between co-habitation (live with) and their total assertiveness inventory score, where P= 0.000. While, there was no positive statistical significant correlation between the rest of the socio–demographic characteristics of the studied patients and their total assertiveness

inventory score. Also the table shows that there is a positive statistical significant correlation between gender and their total hope score, where P= 0.018. While, there was no positive statistical significant correlation between the rest of the socio–demographic characteristics and the total hope score of the studied patients.

This table demonstrations that residence is positively correlated with their total recovery score, where P= 0.020. While, there was no positive statistical significant correlation between the rest of the patients socio–demographic characteristics of and their total recovery score.

Table (1): Percent distribution of the socio–demographic characteristics of the studied patients with schizophrenia

Socio–demographic **characteristics**	**Studied patients (n=100)**	
	N	**%**
Age (years)		
- <20	16	16.0
- (20-<35)	23	23.0
- (35-<50)	35	**35.0**
- (50-<65)	21	21.0
- ≥ 65	5	**5.0**
Range	**(16-73)**	
Mean ± SD	**37.84±15.231**	
Gender		
- Male	60	**60.0**
- Female	40	**40.0**
Marital status		
- Single	44	44.0
- Married	46	**46.0**
- Divorced	6	6.0
- Widow	4	**4.0**
Residence		
- City	47	**47**.0
- Village	53	**53.0**
Live with		
- Alone	10	**10**.0
- With family	90	**90.0**
Educational level		
- Illitrate	12	12.0
- Read and write	15	15.0
- Preparatory education	6	**6.0**
- Secondary education	41	**41.0**
- University education	26	26.0
Occupation		
- Work	45	45.0
- Not work	55	**55**.0
Income		
- Enough	74	**74**.0
- Not enough	26	26.0

Table (2) Percent distribution of the studied patients with schizophrenia according to their clinical data.

Clinical data	The studied patients (n=100)	
	N	%
Duration of illness		
- Less than 5 years	63	**63.0**
- from 5 to 10 years	14	**14.0**
- 10 years or more	23	23.0
Family history of schizophrenia		
- Yes	37	37.0
- No	63	**63**.0
Last time of hospitalization		
- Less than 6 months	48	**48**.0
- From 6 months to one year	14	**14.0**
- One year or more	38	38.0

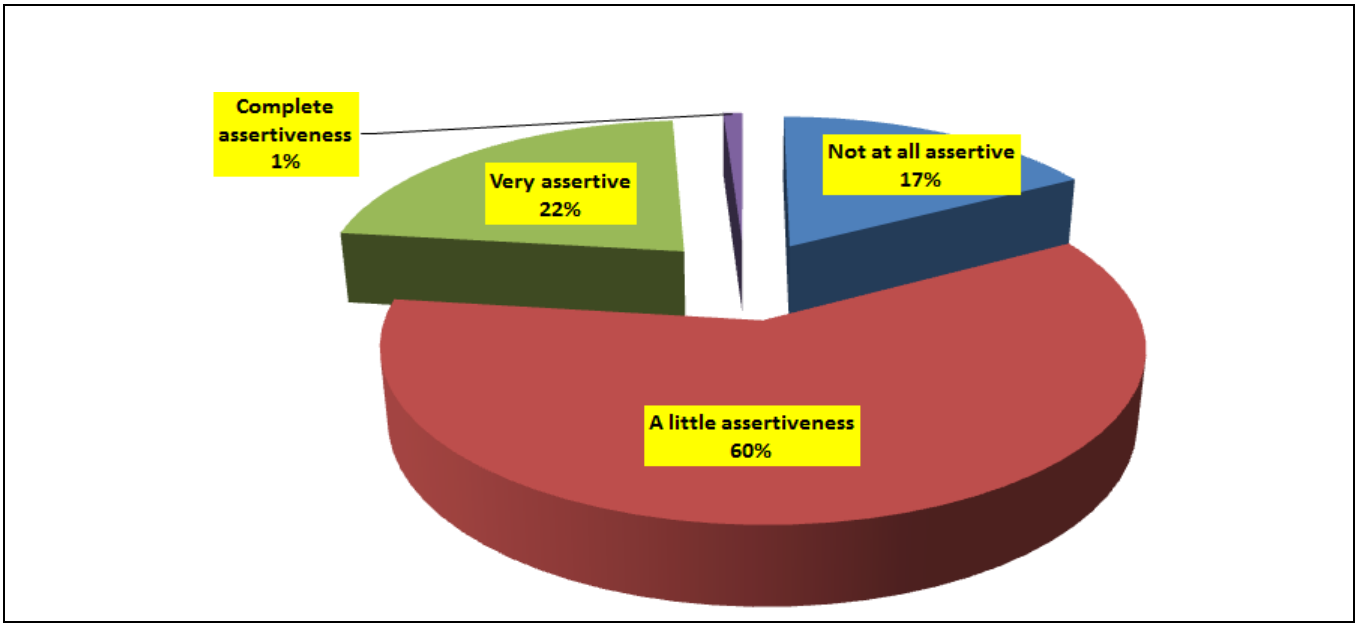

Figure (1)) distribution of the studied patients with schizophrenia according to total assertiveness inventory level percent.

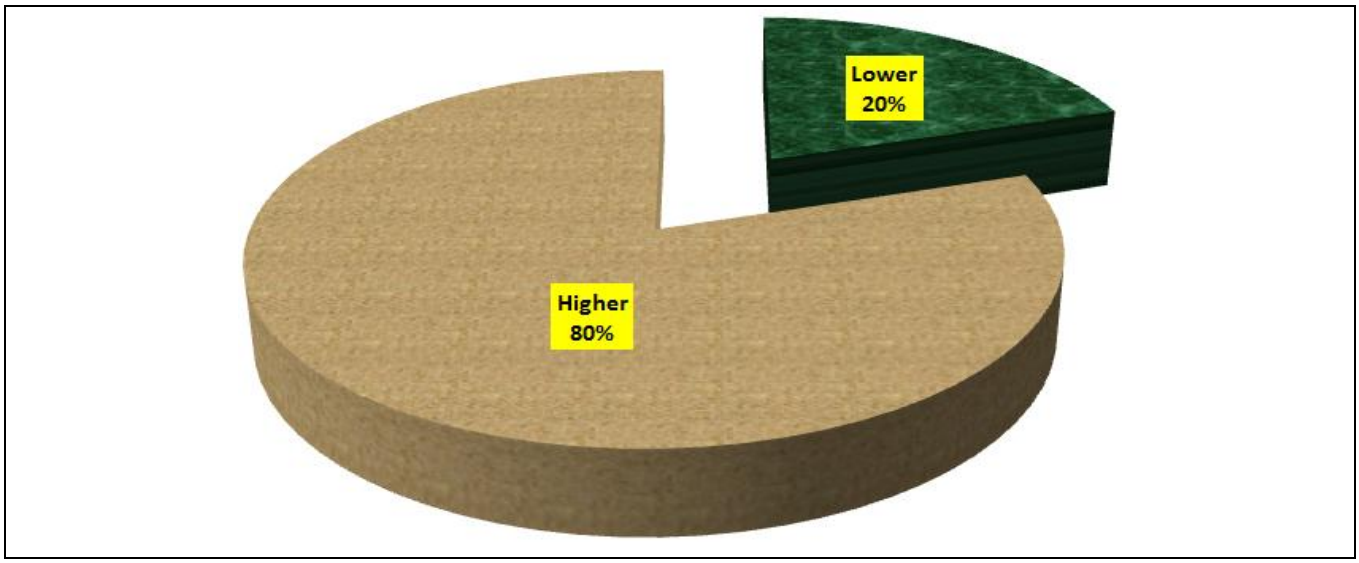

Figure (2) percent distribution of the studied patients with schizophrenia according to the total hope level (HHI).

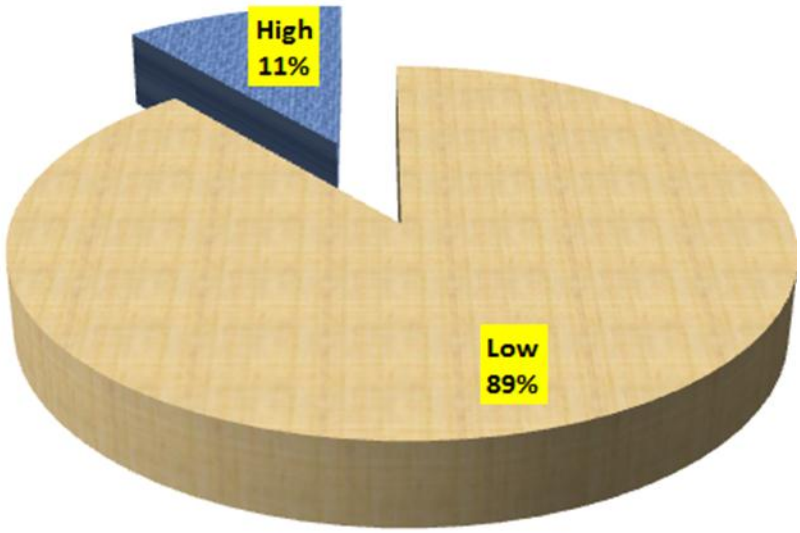

Figure (3) percent distribution of the studied patients with schizophrenia according to the total recovery level.

Table (3) percent distribution, mean and stander deviation of the studied patients with schizophrenia according to assertiveness inventory level.

Assertiveness Inventory Level	The studied patients (n=100)	
	N	%
- Not at all assertive	17	17.0
- A little assertiveness	60	60.0
- Very assertive	22	22.0
- Complete assertiveness	1	1.0
Range	**(10-53)**	
Mean ± SD	**26.98±9.306**	

-Not at all assertive (0-17) - A little assertiveness (18-34)

-Very assertive (35-51) - Complete assertiveness (>51)

Table (4) Total Mean scores of Herth Hope Index (HHI) dimensions among the studied patients with schizophrenia.

Hope Dimensions	The studied patients (n=100)					
	No items	Min	Max	Mean ± SD	Mean Percentage %	Ranking
A. Temporality and future	4	5	15	9.45 ± 2.426	78.75	**3**
B. Positive readiness and expectancy	4	5	13	9.86 ± 1.602	**82.17**	**1**
C. Interconnectedness with self and others	4	4	14	9.66 ± 2.166	80.50	2
Total Herth Hope Index score	**12**	**14**	**42**	**28.97 ± 5.540**		

(12-<24) Lower (24-48) Higher

Table (5) Total Mean scores of recovery dimensions among the studied patients with schizophrenia.

Recovery Dimensions	The studied patients (n=100)					
	No items	Min	Max	Mean ± SD	Mean Percentage %	Ranking
1. Personal confidence and hope	9	10	38	25.91±6.256	57.58	3
2. Willingness to ask for help	3	3	14	9.15±2.754	**61.00**	**1**
3. Goal and success orientation	5	5	23	14.27±4.283	57.08	4
4. Reliance on others	4	4	19	11.02±3.954	**55.10**	**5**
5. Not dominated by symptoms	3	3	14	9.02±3.065	60.13	2
Total Recovery score	**24**	**33**	**98**	**69.37±16.351**		

<70% Low ≥ 70% High

Table (6) Relation between total levels of assertiveness inventory, recovery and hope of patients with schizophrenia.

	Patients with schizophrenia (n=100) Recovery level			
	Low (n=89)		High (n=11)	
	N	%	N	%
Assertiveness inventory level				
- Not at all assertive	17	17.0	0	0.0
- A little assertiveness	53	53.0	7	7.0
- Very assertive	19	19.0	3	3.0
- Complete assertiveness	0	0.0	1	1.0
r , P	0.008 , 0.935			
Herth Hope Index level				
- Lower	20	20.0	0	0.0
- Higher	69	69.0	11	11.0
r , P	**-0.565 , 0.000***			

FE: Fisher's Exact Test

r: Pearson' correlation coefficient

(*) Significant at level P<0.05

Table (7) relation of the socio–demographic characteristics of the studied patients with the total assertiveness inventory, hope and recovery score

Socio–demographic characteristics	Total Assertiveness inventory score Mean ± SD	F/t P	Total Hope scores Mean ± SD	F/t P	Total Recovery scores Mean ± SD	F/t P
Age (in years)						
- <20	25.25±8.963	0.508 0.730	28.13±5.110	1.355 0.255	68.75±14.484	0.196 0.940
- (20-<35)	26.22±10.634		**30.52±5.877**		68.22±20.045	
- (35-<50)	27.34±10.134		29.40±6.189		71.31±16.986	
- (50-<65)	29.05±6.778		26.95±4.511		67.86±13.987	
- ≥ 65	24.80±8.526		30.00±1.871		69.40±11.632	
Gender						
- Male	26.18±9.953	1.100 0.297	**30.03±5.233**	**5.793 0.018***	71.15±15.376	1.792 0.184
- Female	28.18±8.218		27.38±5.669		66.70±17.572	
Marital status						
- Single	26.05±9.640	0.913 0.438	**29.20±5.458**	0.165 0.920	67.64±16.945	0.518 0.671
- Married	28.11±9.339		28.96±5.963		71.30±16.384	
- Divorced	28.83±7.757		27.50±4.370		65.50±15.030	
- Widow	21.50±6.191		28.75±3.948		72.00±12.780	

Residence - City - Village	26.91±10.041 27.04±8.700	0.004 0.948	28.85±5.425 **29.08±5.690**	0.040 0.841	65.34±15.276 72.94±16.579	**5.638** **0.020***
Co-habitation (Live with) - Alone - With family	21.20±5.827 27.62±9.420	**4.435** **0.038***	26.40±4.061 **29.26±5.626**	2.425 0.123	60.20±12.822 70.39±16.440	3.586 0.061
Educational level - Illitrate - Read and write - Preparatory - Secondary - University	27.67±6.998 28.27±9.300 28.33±15.108 25.27±8.709 28.31±9.882	0.589 0.671	**27.92±4.078** 26.27±5.800 **32.67±7.891** 29.22±5.712 29.77±4.667	1.891 0.118	73.83±12.430 67.07±17.846 77.17±17.011 68.15±17.224 68.77±15.800	0.697 0.596
Occupation - Work - Not work	27.80±9.314 26.31±9.331	0.633 0.428	**29.29±5.388** 28.71±5.698	0.269 0.605	70.24±15.209 68.65±17.335	0.232 0.631
Income - Enough - Not enough	26.92±9.603 27.15±8.582	0.012 0.912	28.86±5.251 **29.27±6.397**	0.102 0.751	69.27±16.103 69.65±17.362	0.010 0.919

(*) Significant at level P<0.05

Discussion

The goal of the ongoing, individual process of recovery is to enable an individual to have a fulfilling life despite the restrictions imposed by their disease [20]. An emphasis on personal recovery is becoming more and more crucial components of mental health treatment in many nations. [3]. Hope is the fundamental pillar of rehabilitation, as it is the force behind transformation and enables the other components to take the lead. People with assertive behavior have healthy interpersonal relationships with others and are able to express a range of emotions—both positive and negative—without worrying about offending others or feeling guilty about doing so [16] .

In addition, the ability to be assertive is acknowledged as a crucial social skill that enhances wellbeing [21]. Individuals who have assertive behavior generate worthy interactive connection with others and can express their thoughts positive and negative without guilty, anxious, or disrespectful rights of others**.** In order to discover the relationship between assertive behavior, hope feeling, and recovery for patients with schizophrenia, the current study was conducted [22].

The current study illustrated that majority of patients with schizophrenia were nonassertive this might be clarified by the fact that patients often struggled assertiveness when performing their daily tasks and social obligations because they lacked the confidence to ask for what they wanted or to refuse it in various situations involving their

relationships with friends and family. This frequently resulted in continuing burden, strong anxiety, blame, and defeat, as well as practical deficiency.

This is inconsistent with **Ustun, and Kucuk 2020**, who have shown that patients with schizophrenia have moderate levels of assertiveness [13]. Also **Abd-Elmonem et al 2019**, in their study showed that nearly half of the subjects had unassertiveness skills (55.3%).This might be related to that schizophrenic disease affect individual in early stage of development so it causes impairment in assertiveness skills [16]. **In addition** , **Mousa et al 2011** revealed that the studied schizophrenic patients originally had a moderate level of assertiveness . [15]

Hope is expected to have a significant role in overcoming mental illness and is considered to improve the value of lifespan for those who have schizophrenia. According to the outcomes of the present study the mainstream of the studied patients had high levels of hope. This may be due to that many of the patients live with their family and have enough income**,** which encourages them to be concerned about their care and rehabilitation.

This result was in agreement with **Mahmoud et al 2021,** who reported that most of the studied patients have a high level of hope [10]. On the other hand, a study by **Barut et al, 2016,** who studied the lives of persons with schizophrenia regarding sense of belonging and hope, found that more than half of patients have no hope or hopelessness, severe symptoms of schizophrenia resulted in lack of hope [23]. Also **Kavak , and Yilmaz,2018,** reported that it is seen that the hope levels of schizophrenia patients are low [24] .

This study clarified that the mainstream of the patients had little levels of recovery**.** This could be a result of patients not taking the drugs as prescribed, which could lead to worsening symptoms, a higher risk of relapse and hospitalization, as well as lower levels of occupational and social functioning, levels of disability, and a lower quality of life. This outcome was in consistent with **Coşkun, and Altun 2018**, who looked at the connection between patients with schizophrenia's levels of hope and functional recovery and showed that these individuals had low rates of functional recovery [25]. Also the study of **Slade and Longden, 2015**, who reported that few people with mental health problems recover, in other words, the substantial majority of people given a diagnosis of schizophrenia do not recover [26]. This result is inconsistence with the study of **Uzdil, and Tanrıverdi 2015,** who founded that the total functional remission's score was also high, and that meant that the patients take their medication regularly and thus doesn't negatively affect their lives and resulted in a better outcome [27] . Also the study of **Mahmoud et al 2021,** did not agree with this finding as they reported that the mainstream of the studied patients (86.5%) report high functional remission [10].

Many patients with schizophrenia are able to create useful, satisfying survives as memberships of culture when they get hope and optimism conveyed from recovery. The current study revealed a negative statistical relation for the patients' hope level with their recovery level. This finding can be interpreted to patient who has a high level of hope have a good recovery but in this study the hope is negatively correlated with the recovery level, as the level of hope is very high while the recovery of patients is very low and this may be due to lack of insight of patients and unawareness of importance of compliance with medication that lead to low recovery.

This is in conflict with **Mahmoud et al 2021** who found that there was a significant positive association between the total score of hope level of patients with schizophrenia and the total score of functional recovery [(10)].

The current finding illustrates a positive statistically significant relation between co-habitation (live with) and their total assertiveness inventory score. This may be related to patients are less aware of their mental health condition and leading to a high burden of illness, so living with family giving them support and caring which lead them to tolerate their illness.

There was a significant relationship between hope level and gender in the current study**,** as the male patient had highest hope level than female. That's may be because our country (Egyptian society) is more focus on men than women, and many families feel embarrassment if they have female sick with schizophrenia and do not pay more attention to them. This result was supported by the study conducted by, **Mahmoud et al 2021** who stated that a significant statistically relation between hope level and sex [(10)]. Also **Seeman 2019,** who discovers that sex differences vary with the patient's age, they also vary with a socio-cultural background of study population. The hope is that studying gender differences will expose critical elements of good outcomes that lead to interventions that will benefit females and males. Therefore, has domination on good outcome [(28)].

The present study showed that there is a positive statistical and significant relation between patients' residence and their total recovery score. This related to that recovery in patients who resident in rural areas was higher when compared patients resident in urban areas this result could be explained by those rural areas in Egypt have not adequate health services and resources as the large economic consequences for community, with a big cost of psychotic diseases causing missing output. This is inconsistent with **E l-Monshed and Amr 2020,** who found that recovery was higher for patients resident in urban areas while recovery was lower for patients resident in rural areas [(29)].

Conclusion

Study findings conclude the fact that, schizophre nic patients generally demonstrate nonassertive behavior and found to have low recovery levels, low level of assertiveness, and high hope level. Also, the findings of the study revealed that there was no statistically significant correlation between total assertiveness level and total recovery level, while there was highly negative statistically significant correlation between hope level and recovery level.

This statistically significant positive link between assertiveness inventory score and recovery of patients is logical result because person who has assertiveness should be able to communicate wants, feelings, or rights to others which motivate them to take an active role in choosing all elements of their care and supportive services but hospitalized patients with schizophrenia did not give training related to these skills to help them.

There was a significant positive statistically relation between co-habitation (live with) and their total assertiveness inventory score. Hope was shown to be significantly related with sex. Also there is a positive statistical significant relation between patients' residence and their total recovery score.

Recommendation

The results of the current study recommended the following suggestions:

1) Assertiveness skill training program should be held for all psychotic patients in hospitals is often required to help patients learn an active manner to relate assertively.

2) Collaboration between all health team members to establish precise objectives for behavior modifications, improving assertiveness and increasing patient's recovery.

3) More investigation into the role of hope in the recovery process helps to comprehend the connection between hope and mental health recovery.

4) Further studies are required to discover the likely association between the assertive behaviors for patients with schizophrenia and create useful plans to enhance recovery and mental health.

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