Assessment of Interpersonal Difficulties among Patients with Schizophrenia

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Abstract

Background: Interpersonal difficulties are characteristic of those diagnosed with schizophrenia at all stages of the illness. Interpersonal difficulties involve difficulties related to controlling and manipulating others, difficulties that are related to suspicion and distrust of others, and an inability to experience empathy for the needs of others, difficulties expressing affection and love toward others, difficulties maintaining long-term relationships, and trouble forgiving others, difficulties initiating social interactions, feeling anxious interacting with others, and having problems expressing emotions with others, difficulties being assertive with others and difficulties taking on roles of authority.

Aim of the study: to assess the interpersonal difficulties among patients with schizophrenia.

Setting: The study was carried out at EL-Abbasyia Hospital of Mental Health in the middle area of Cairo Governorate (Egypt). Subject: A convenient sample of 34 hospitalized patients with schizophrenia.

Data collection tools: 1) Socio-demographic Data Questionnaire. 2) The Inventory of Interpersonal Problems-Circumplex (IIP-C; Alden, et al., 1990) adopted and translated into Arabic by the researcher.

Results: The overall IIP-C revealed high interpersonal difficulties among patients with schizophrenia.

Recommendations: On the light of the findings of the study, it is recommended: to conduct a health education program to reduce interpersonal difficulties level among patients with schizophrenia.

Key words: Schizophrenia, Interpersonal Difficulties, Inventory of Interpersonal Problems (IIP)

Introduction:

Schizophrenia spectrum disorders are evident in literature as far as pharaonic Egypt. It was firstly prescribed by Kraepelin in 1887 as "dementia praecox" and was renamed by Bleuler in 1911 as schizophrenia (Vella & Pai, 2015). This organic and psychotic disorder is among the world's 10 top causes of long-term disabilities. It is not only chronic, debilitating or heterogeneous, but also it is devastating and complex major mental disorder effecting 1% of the population worldwide and has been the focus of scientific integration for more than a century (La Toya, 2016).

Negative symptoms remains the core feature of schizophrenia until the 1960’s when the focus changed to positive symptoms; which is still the key focus today and this resulted in a dearth of research and management for negative symptoms (Hamilton, Williams, Ventura, Jasperse, Owens, Miller, & Yee, 2018). Negative symptoms include apathy or lack of concern. Patient’s emotional gesture and facial expression are usually mistaken as being flat and unemotional as the patient is unable to express emotions (affective flattening/blunted affect) or he/she contextually expresses inappropriate emotions. Patient also manifest the lack of motivation for per saving any goal directed activities (avolition), inability to experience pleasure (anhedonia), general lack of interest in social relationships (asociality) and psychomotor poverty. Symptoms stipulate discernable social and occupational dysfunction (Searles, 2018).

Deficit in social functioning and skills are among the core characteristics of schizophrenia. It plays an important role in assessing its outcome. Social functioning is a term applied to self-reports or other reports of interpersonal behaviors in community setting skills of independent living, ratings of social problem solving skills. Social cognition, which refers to how people think about themselves and others in the social world, significantly contributes among individuals with
The interpersonal distress of positive symptoms of people with schizophrenia may be presented as active withdrawal from interpersonal interaction due to paranoid attributions or apathetic attitude toward the social world of interpersonal distress. However, patients who present with predominantly introjective, negativistic symptoms tend to report more interpersonal difficulties than those with more psychotic symptom profiles (Grisham, Steketee, & Frost, 2008). Sullivan's proposed that in patient with schizophrenia interpersonal traumas cause fragmentation and high degree of anxiety which interferes with the desire for connectedness early in life. Significant others don't allow for the relationship necessary for adequate identity development early in life of the patient as they relate with neglecting, over construction or disturbance making a long history of need frustrating and precarious interpersonal experiences (Perez-Rodriguez, Derish, Palomares, Kaur, Cuesta-Diaz, & Lis, 2018).

Interpersonal difficulties involve difficulties related to controlling and manipulating others, difficulties that are related to suspicion and distrust of others, and an inability to experience empathy for the needs of others, difficulties expressing affection and love toward others, difficulties maintaining long-term relationships, and trouble forgiving others, difficulties initiating social interactions, feel anxious interacting with others, and have problems expressing emotions with others, difficulties being assertive with others and difficulties taking on roles of authority (Horowitz, Alden, Wiggins et al., 2000).

Aim of the study:
This study was conducted to assess the interpersonal difficulties among patients with schizophrenia.

Subjects and Method:
This study was presented under the following four main designs:
1. Technical Design
2. Administrative Design
3. Operational Design
4. Statistical Design

1- Technical Design
Technical design included research design, setting, subjects and tools for data collection.

a. Research Design: a descriptive explanatory design was utilized in this study.

b. Research Setting:
The study was carried out at EL-Abbasyia Hospital of Mental Health in the middle area of Cairo Governorate (Egypt).

c. Research Subjects
A convenient sample of 40 hospitalized patients with schizophrenia was recruited for the conduction of the current study.

Inclusion Criteria:
- Male and female.
- Being aged ≥20.
- Being diagnosed with schizophrenia.
- Being oriented to time, place and persons.
- Being capable of verbal communication.
- Being able to attend a 1-hour session.
- Willing to attend program.

Exclusion Criteria:
- The presence of ongoing medical or neurobiological condition that would interfere with the patient's ability to communicate.
- Current or a history of drug or substance abuse other than nicotine.

d. Tools for Data collection: An interview questionnaire tool was developed by the researcher based on literature review consisted of:

(1): Socio-demographic Data Questionnaire: Patient's age, gender, educational level, marital status, occupation and duration of hospitalization.

(2): The Inventory of Interpersonal Problems-Circumplex (IIP-C; Alden, et al., 1990): is a 64 item instrument derived from the
127 item Inventory of Interpersonal Problems. Two types of items are included in the measure: interpersonal behaviors that are “hard for you to do” and interpersonal behaviors that “you do too much.” Each item is rated on a 5-point Likert-type scale with anchors of “not at all” (1) and “extremely” (5). The tool was adopted and translated into Arabic.

<table>
<thead>
<tr>
<th>Anchors</th>
<th>Interval</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Extremely low</td>
<td>1.00-1.79</td>
</tr>
<tr>
<td>Disagree</td>
<td>Low</td>
<td>1.80-2.59</td>
</tr>
<tr>
<td>Sometimes</td>
<td>Average</td>
<td>2.60-3.39</td>
</tr>
<tr>
<td>Agree</td>
<td>High</td>
<td>3.40-4.19</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>Extremely high</td>
<td>4.20-5.00</td>
</tr>
</tbody>
</table>

**Tool validity:** It was ascertained by three expertise in the Mental Health and Psychiatric nursing department. They were from different academic categories, i.e., professor and assistant professor. To ascertain relevance, clarity and completeness of the tools, experts elicited responses, which were either agree or disagree for the face validity and content reliability. Necessary Modifications were done according to the experts’ opinions.

**Reliability Analysis:** the reliability of the tool was assessed through measuring their internal consistency by Cronbach Alpha Coefficient test and its value was (0.697).

2- **Administrative Design:**

Official permission to conduct the study was obtained by submission of an official letter issued from Dean of the Faculty of Nursing at Ain Shams University and from the General Secretariat for Mental Health was directed to the director EL- Abbasyia Hospital of Mental Health. The researcher contacted to patients in groups with presence of the representative of the Patient Right committee to explain the purpose and procedure of the study and arranged with them the available time to collect the data and implement the psycho social intervention program.

**Ethical consideration:**

The ethical research considerations in this study include the following:

1. A written initial approval was obtained from the research ethical committee at the Faculty of Nursing, Ain Shams University.

2. Patient” written consent for their participation was secured through the hospital representative of the Patient Right Committee.

3. The researcher cleared the objectives and aim of the study & its expected outcomes to participating patients.

4. The researcher maintained anonymity and confidentiality of participating to participating patients.

5. Participating patients were allowed to choose to participate or not in the study, and given the right to withdraw at any time from the study without giving reasons.

**3- Operational Design:**

The operational design includes preparatory phase, pilot study, and field work.

**Preparatory Phase:**

Obtaining required tools and designing the program: A review of related literatures was done using available books, articles, and journals, to cover various aspects of interpersonal difficulties among schizophrenic patients, and also to obtain the relevant standardized tools and to develop the intervention program. First, **Socio-demographic data questionnaire** was designed, developed and adapted by the researcher. The researcher translated the Inventory of Interpersonal Problems- Circumplex (IIP-C; Alden, et al., 1990). In this procedure, (a) the researcher translated the instruments (English formats) into Arabic language, (b) rendered the same English formats to bilingual experts for more verification of the translation of the Arabic formats, (c) and minor discrepancies in the content were found and necessary modifications were done.
-Pilot Study:
A pilot study was carried out after the adaptation of the tools and before starting the data collection. It was conducted on (10%) of the expected sample size to test the clarity, feasibility and applicability of the study tools. In addition, it served to estimate the approximate required time for interviewing the participating patients as well as to find out any problems that might interfere with data collection. After obtaining the result of the pilot study, the minor changes (item modifications, omissions and additions) were done and final form was developed under the guidance of supervisors. All participants in the pilot study were excluded later from the actual sample.

-Field Work:
The researcher met with the patient's rights committee at EL Abbasyia Hospital of Mental Health in order to recruit patients for participation in the study according inclusion and exclusion criteria. Individuals interview were conducted with the patients before their inclusion in the research to ensure that they were eligible to take part in the study. It takes 30-35 minutes for each subject to ensure that patient's mental and educational capabilities don't interfere with the patient's response. Written informed consents were obtained from each patient. Then, sociodemographic data questionnaire and IIP-C is collected through verbal communication to ensure that patient feel more at ease with answering the questions as most of them are illiterate and not able to fill the tools by themselves.

4- Statistical Design:
Data Management and Analysis: The collected data was revised, coded, tabulated and introduced to a personal computer using statistical package for social sciences (IBM SPSS 20.0). Data was presented and suitable analysis was done according to the type of data obtained for each parameter. Descriptive Statistics: Mean, Standard deviation (+ SD) and, Frequency and percentage of non-numerical data.

Results:
Part I: socio-demographic characteristic and studied patients.
Table (1): shows that, the mean age o of the studied patients was 46.88+12.26. The majority of patients lied within the age group category (41-50 yrs). The majority of patients were females with percentage of (64.7%). Regarding marital status, the majority of patients were never married with percentage of (55.9%) while regarding educational level, the percentage of patients who can read and write was the highest.

Part II: Interpersonal Difficulties level.
Table (2): shows that the overall IIP-C reviled high interpersonal difficulties. The most difficulties were related to subscales; LM (Overly Nurturant), JK (Exploitable), NO (Intrusive) and HI (Nonassertive) while BC (Vindictive) DE (Cold), FG (Socially Avoidant) and PA (Domineering) show moderate difficulties.
Table (1): Frequency distribution of studied patients as regards their demographic characteristics (N=34).

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-30 yrs.</td>
<td>2</td>
<td>5.9</td>
</tr>
<tr>
<td>31-40 yrs.</td>
<td>9</td>
<td>26.5</td>
</tr>
<tr>
<td>41-50 yrs.</td>
<td>15</td>
<td>44.1</td>
</tr>
<tr>
<td>51-65 yrs.</td>
<td>8</td>
<td>23.5</td>
</tr>
<tr>
<td><strong>Mean ± SD</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>46.88±12.26</td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>22</td>
<td>64.7</td>
</tr>
<tr>
<td>Female</td>
<td>12</td>
<td>35.3</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never married</td>
<td>19</td>
<td>55.9</td>
</tr>
<tr>
<td>Married</td>
<td>4</td>
<td>11.8</td>
</tr>
<tr>
<td>Divorced</td>
<td>9</td>
<td>26.5</td>
</tr>
<tr>
<td>Widowed</td>
<td>2</td>
<td>5.9</td>
</tr>
<tr>
<td><strong>Educational Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>7</td>
<td>20.6</td>
</tr>
<tr>
<td>Can read and write</td>
<td>10</td>
<td>29.4</td>
</tr>
<tr>
<td>High school</td>
<td>9</td>
<td>26.5</td>
</tr>
<tr>
<td>University</td>
<td>8</td>
<td>23.5</td>
</tr>
</tbody>
</table>

Table (2): IIP-C interpersonal difficulties level(N=34).

<table>
<thead>
<tr>
<th>IIP-C subscale</th>
<th>Mean</th>
<th>Std.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA (Domineering)</td>
<td>3.09</td>
<td>.69</td>
</tr>
<tr>
<td>BC (Vindictive)</td>
<td>2.67</td>
<td>.82</td>
</tr>
<tr>
<td>DE (Cold)</td>
<td>2.84</td>
<td>1.15</td>
</tr>
<tr>
<td>FG (Socially Avoidant)</td>
<td>3.01</td>
<td>1.27</td>
</tr>
<tr>
<td>HI (Nonassertive)</td>
<td>3.41</td>
<td>1.10</td>
</tr>
<tr>
<td>JK (Exploitable)</td>
<td>3.54</td>
<td>.82</td>
</tr>
<tr>
<td>LM (Overly Nurturant)</td>
<td>3.58</td>
<td>.84</td>
</tr>
<tr>
<td>NO (Intrusive)</td>
<td>3.52</td>
<td>.92</td>
</tr>
<tr>
<td><strong>Total IIP-C</strong></td>
<td>3.43</td>
<td>.70</td>
</tr>
</tbody>
</table>

Discussion:

Regarding to the mean age of the studied patients, it was (46.88±12.26). The majority of patients lied within the age group category (41-50 yrs). This result may be due to that the selection of the study sample was from the patient group fall within article 10 of the Egyptian Mental Health Act. The policy of hospital rules this in accordance with Patient Rights Committee group. In line with the idea of schizophrenic patients in the middle age, the prevalence in the USA is 0.6%-1.0% in people aged between 45 and 64 years while in developing countries, it is supposed that in the first quarter of this century, i.e within 2025, the number of people with schizophrenia aged 55 years and older will double, reaching 1.1 (Cohen, Meesters, & Zhao, 2015).

Regarding to gender, the majority of patients were females with percentage of (64.7%). According to literature, men and women with schizophrenia manifest the illness differently. Gender differences become an issue of much consideration as it was proposed that negative symptoms were initially severe in male than females however, these differences disappear in the middle aged patients. Middle aged show significantly less positive and affective symptom in both gender and more prevalent negative and cognitive symptoms (Davis, 1995). Although some past literature suggests these gender differences in schizophrenia, there is an assumption that the illness is similar in men and women. This assumption came from the little systematic investigation that has been carried out in this area (Zhang, 2019).

Regarding marital status, the majority of patients were never married with percentage of (55.9%). In traditional societies failure to get marry especially for women is determined as a stigma. Although marriage could contribute to better outcome in patients with schizophrenia as they live with their partners and tend to get support from the family when marriage are
broken, patients face discrimination and hostility from family members and societies. In line with previous studies, a study sample of 101 patients with schizophrenia revealed that about 69.3% of total sample were married and about 30.7% were unmarried. Further studies are needed to detect the influence of marriage on schizophrenia and factors that may influence marital stability in patients with schizophrenia (Deshmisk, 2016).

Concerning to educational level, the percentage of patients who can read and write was the highest.

While IIP-C may measure general interpersonal pattern of change, deficit in interpersonal functioning in person with schizophrenic disorder could be an integral birth of a schizophrenic psychotic episode itself, secondary effects of schizophrenic psychotic symptomatology or vulnerability or potent rating factors that are antecedent to schizophrenic episode and may influence their development (Salsman, 2006). Previous research also has found that schizophrenic patients who are aware of their interpersonal difficulties also tended to underestimate the severity of these problems. On the other hand, socially withdrawn individual though not diagnosed with schizophrenia often reported elevated levels of interpersonal distress, despite not having much interpersonal contact (Sparks, McDonald, Lino, O'Donnell & Green, 2010).

The IIP-C inventory is locating eight specific interpersonal difficulties based on their angle location in the two dimensional circumplex spaces. Starting from the dominant pole of the agency dimension and moving center clock wise the octant and corresponding scale.

Concerning total PA domineering subscale in the intervention group and control reflect moderate difficulties. In its problematic form, dominance turns into difficulties related to controlling, manipulating, being aggressive toward and trying to change others. High scores on the PA (Domineering) subscale report this related difficulties. On the contrary, in a study sought to clarify how dependency traits may be related to neurocognition and clinical symptoms of schizophrenia, multiple regression analyses demonstrated that greater neurocognitive deficits predicted greater dependency needs. However, there is no relationship was found between symptoms and the level of dependency needs (Lysaker, Wickett, Lancaster, Campbell & Davis, 2004).

BC Vinditive subscale which is located at 135 of the circumplex. It reported difficulties that are related to suspicion and distrust of others and inability to experience empathy for the needs of others i.e. it report paranoid ideation symptoms. Some schizophrenia researchers have suggested that the heightened negative emotions experienced by people with schizophrenia may result from failure to down-regulate negative emotions, indicating an explanatory role for emotion regulation and empathetic deficit schizophrenia.

DE Cold which is located at 180 on the circumplex. High scores report difficulties in expressing affection and love towards others, difficulties maintaining large term relationship and troubles in forgiving others.

According to Collins (2003) coldness represents the other end of the affiliations continuum and includes individuals who tend not to be warm Cooperative or nurturing. Individuals usually describe themselves as lacking warmth being unkind and unsympathetic i.e. "a lone wolf". Meanwhile, Leary observed with hostility to be involved in coldness communicated through subtle attitude of punishment discipline and provoking guilt rather than overly destructive acts i.e there is correlation between being cold and hostile.

The 4th subscale of IIP-C. It is located at 225 on the circumplex and is labeled FG (socially avoidant). People who score highly on this subscales, reports difficulties initiating social interactions feel anxious interacting with others and often have problems expressing emotions with others.

Sullivan views the basic function of interaction that all interpersonal behavior is guided by the purpose of avoiding anxiety or developing self-esteem. The challenges that
schizophrenia patients experience when it comes to relating to and understanding the social world likely limit the extent to which they can develop supportive interpersonal relationships. They don't pick up on the kind of social hint that all obvious to most people. They also tend to be emotionally unexpressive and hard for others to read. The preference of schizophrenia for limited amount of social contact (Wallace, 1984).

HI Non-assertive subscale which is located at 270 on the circumplex. High scores report problems being assertive with others and the difficulties taking on roles of authority. According to Bjerk (2016) patients with non-assertive interpersonal problem report both much interpersonal distresses in general as well as highly intensive problem of their non-assertive kind. The majority of patients seemed to have most problems with low assertiveness reported the highest levels of interpersonal distress in general. A similar pattern of results was obtained in Lock, (2000) study patients within the non-assertive octant group who were clearly largest in his sample were characterized by high levels of general and distinct interpersonal stress.

The sixth scale of IIP-C labeled JK (exploitable) and is located at 315 on circumplex. People who score highly on this subscale describe themselves as gullible or easily fooled by others. It is important to highlight the fact that studies have shown that people with a psychotic disorder are more often victims. Every year approximately 1 in 5 individuals with a psychotic disorder becomes victimized and victimization rates were approximately 4–6 times higher than in the general community. People whose social functioning is impaired face additional risks because they may not be able to develop a social network that protects them and because they may have difficulty to detect social threats in time (de Vries, van Busschbach, van der Stouwe, Aleman, van Dijk, Lysaker, & Pijnenborg, 2019).

NO subscale, which is located at 45 on the circumplex. It is the eight subscale of IIP-C and is labeled NO (intrusive). People who score highly on this subscale report the problem with attention-seeking inappropriate self-disclosure and difficulties spending time alone. Prior studies suggest that while individuals with schizophrenia experience more severe levels of loneliness, their experience of loneliness may be associated with similar cognitive biases and downstream effects on emotional and physical health as found in the general population. Specifically, loneliness in schizophrenia is associated with negative interpersonal expectations. Loneliness was associated with a broader range of clinical and positive psychological characteristics, including age of schizophrenia onset, mental well-being, perceived stress, optimism, resilience, and happiness (Eglit, Palmer, Martin, Tu & Jeste, 2018).

Conclusion:
Based on the findings of the present study, it can be concluded that: shows that the overall IIP-C reviled high interpersonal difficulties. The most difficulties were related to subscales; LM (Overly Nurturant), JK (Exploitable), NO (Intrusive) and HI (Nonassertive) while BC (Vindictive) DE (Cold), FG (Socially Avoidant) and PA (Domineering) show moderate difficulties.

Recommendations:
On the light of the findings of the study, it is recommended: to conduct health education intervention to reduce interpersonal difficulties level among patients with schizophrenia. The developed intervention should be implemented on a wider scale and longer time in the study settings and in similar ones to confirm its positive effects and improvement.

Future programs should include the Psychiatric nurses teaching them how to deal with schizophrenic patients regarding their individuality to improve interpersonal skills in inpatient words to support what the psychoeducational interpersonal intervention teach patients.
Financial support:
No funding was received

Conflict of interest:
No

References:


