Social Support and Childhood Maltreatment among Patients with Schizophrenia at El-Azazi Hospital for Mental Health

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Abstract

Background: Schizophrenia is a complex psychiatric illness, representing the eighth leading cause of disability among patients. The affected persons suffer from marked impairments in social and occupational functions. It represents 7.4% of all disabilities resulted from psychiatric disorders and substance use disorders worldwide.**The aim of the study** was to determine the relationship between social support and childhood maltreatment among patients with schizophrenia. **Subjects and Methods: Research design:** A correlational descriptive study design was utilized in this study. **Setting:** This study was carried out at El-Azazi Hospital for Mental Health in Abo-Hamad City,Sharqia Governorate**. Subjects:** A purposive sample of patients diagnosed with schizophrenia (102) from both genders present at the previously mentioned hospital at the time of the study was recruited. **Tools of data collection**: Four tools were utilized in this study: Socio-demographic data sheet, Positive and Negative Syndrome Scale (PANSS), Childhood Traumatic Questionnaire (CTQ) and The Multidimensional Scale of Perceived Social Support (MSPSS**)**. **Results:** the current study results revealed that the highest percentage of perceived social support among studied patients was from significant others, followed by family and friends. The majority of patients had moderate to severe level of positive symptoms. Emotional neglect was the most prevalent type of childhood maltreatment among the studied patients.Total CTQ was positively correlated with total positive and total psychological symptom scale; however it was negatively correlated with the total negative symptom scale. Total social support was negatively correlated with the total general psychological scale and total CTQ. **Conclusion**: The level of social support was low among studied patients. Social support was negatively correlated with the general psychological scale and CTQ. **Recommendations:** A training program for nurses about the importance of social support to mentally ill patients and their families during difficult times is recommended.

Key words: Childhood maltreatment, patient with schizophrenia, social support

Introduction

Schizophrenia is a chronic psychiatric disorder that influences the patient's quality of life and results in significant economic and social burdens **(Owen, Sawa, & Mortensen, 2016).** It is characterized by variety of symptoms such as positive symptoms (e.g., delusion and hallucination), negative symptoms (e.g., poor motivation and impaired social communication), and limitation in cognitive abilities **(Roussos, et al. 2016).** These symptoms may develop either suddenly or gradually and vary from one patient to another. Schizophrenia develops in cycles of remissions and relapses **(Millier, et al., 2014).** As a result of high level of disability, patients with schizophrenia are unable to accomplish their social roles and responsibilities and always have tremendous difficulties to behave appropriately in social situations or identify verbal and non-verbal communication of others **(Singh & Goyal, 2017).**

Social support is the experience or perception that an individual is cared for and loved by others, valued and esteemed, and parts of a social group of reciprocal support and obligations. Social support can also be explained as perceived support, consisting of the perceived accessibility, and sufficiency of supportive relations, or enacted support,

including supportive manners themselves **(Morin, et al 2017).** Social support can further be classified into, tangible support, emotional support, informational support,and companionship support **(Gayer-Anderson, & Morgan, 2013).**

Chronicall ill patients with schizophrenia have incompetent social support in terms of quality and quantity. Moreover, finding emotional support is very difficult for those patients.They perceive that the support they receive in social rehabilitation systems is usually formal in character. Previous studies indicated that majority of patients with schizophrenia experienced the requirement of additional emotional support, confidence-based relations and advice. Within worsening of symptoms, mentally ill patients miss people in their social networks this may be due to increasing burden of their care, limiting their social relations which may result in more networking problems **(Eweida, Maximos, & Sharaf, 2017).**

Social support is an important factor for patients with schizophrenia. When patients with schizophrenia experience deficiency in social support, they are unable to make friends, obtain employment, and hold long-term effective social roles in the community. On the contrary, when they have high levels of social support, their level of life satisfaction and feeling of happiness increased. This may be due to that social support increases the patients' ability to practice social communications and interpersonal relationships, which may improve their coping strategies **(Allen, 2015).**

Personal belief that others are ready to provide practical and emotional aid, has been demonstrated to affect an individual's coping with stressful events, probably by formulating cognitive evaluation of stressful events. Additionally, those with limited social support have been found to be more susceptible to common mental disease **(Gayer-Anderson, et al., 2015).**

Outcome of schizophrenia and other psychiatric disorders has been shown to be related to social support, either directly or through the effect of family interventions on improving social function, relieving symptoms, as well as the length and number of hospitalizations **(Rabinovitch, et al., 2013).** Furthermore, Social support has been recognized as a protective factor against the development of adjustment problems and psychopathology after exposure to various kinds of child abuse, as childhood physical abuse (PA) and sexual abuse (SA) **(Lamis, et al., 2014).**

Childhood maltreatment (CM) is an international problem that has immediate and long-term harmful influence on psychological and physical health **(James, et al., 2016).** It can be classified into active abuse; i.e. emotional, physical, and sexual abuse, as well as passive abuse; i.e. emotional and physical neglect **(Mørkved, et al., 2018).** Childhood maltreatment affects various domains as mental health, relationships with others, academic and behavioral functioning. These negative consequences have long lasting effect which may extend into adulthood like increasing risk for criminal behavior and health problems **(Negash & Maguire-Jack, 2016).**

Childhood maltreatment affects the development of normal emotional perception processes, especially diminished ability to properly recognize both basic and complex emotions of other people, mainly positive and neutral facial expressions of emotion **(Koizumi & Takagishi, 2014 ; Young, & Widom, 2014)**. Additionally, there is complicated relationship with the form of abuse experienced by the person; those exposed to neglect have trouble discriminating between expressions, and those exposed to abuse display distortion in recognizing expressions as angry and accept anger as the suitable facial expression in contextual unsuitable circumstances **(Gallagher, 2018).**

Various previous studies confirm that exposure to childhood maltreatment, as sexual, physical, psychological abuse, and bullying is correlated with increasing risks for various psychopathological conditions, including schizophrenia during adulthood **(Teicher, &**

Samson, 2013; Duhig, et al., 2015). Moreover, childhood trauma is accompanied by increasing severity of psychotic symptoms over time and limits relief of negative and positive symptoms after the first episode of psychosis, which may have a significant effect on long term quality of life and functional outcome **(Pruessner, et al., 2018).**

Patients with schizophrenia who were exposed to CM, suffer from adverse effects on cognitive functions, particularly rate of information processing, episodic narrative memory, working memory, executive function, visual–perceptual organization, and verbal ability **(Shannon, 2011).** Childhood maltreatment also leads to long-lasting change in emotional responses as increased reactivity to everyday stressful life events. The anticipated mechanisms for this may be related to abnormal reactions to stress through interactions between genetic and CM, abnormalities of hypothalamic-pituitary-adrenal axis, and genetic vulnerability, which may increase the effect of CM **(Van Winkel, et al., 2013).**

Significance of the study:

Childhood maltreatment has been identified as a major risk factor for psychosis. About half of severely mentally ill patients, especially patients with schizophrenia have been exposed to many types of child maltreatment (**Álvarez, et al., 2011)**. A history of childhood maltreatment affects expression and severity of symptoms, compliance with medication and associated with decreased social functioning, leading to worse patient outcomes **(Chaurotia, Verma, & Baniya, 2016)**. The 2014 UNICEF statistical analysis of violence against children revealed that almost one billion children in the world, between the ages of 2 and 14, suffer regular physical punishment, and almost 1 in 4 girls between the ages of 15 and 19 experience physical violence. Worldwide, 3 in 4 children aged 2–4 years – approximately 300 million youngsters – are physically and/or emotionally abused by their parents or caregivers on a regular basis. In turn, one in every five women and one in every thirteen males say they were sexually molested as children between the ages of 0 and 17. **(WHO, 2021).**

Social support following stressful situations can assist cognitive and emotional processing, allowing the affected person to re-evaluate the situation in a more adaptive way. Additionally, social support is believed to be an essential protective aspect for those who experience maltreatment during their childhood. The exposure to CM without subsequent social support can be identified as a double trauma for many reasons, because the individual's requirements for assistance and support are unmet which go online with the description of emotional neglect; attachment relations with caregivers are under mimed; sense of unworthiness and despair may be accelerated; and in severe cases, dissociative processes possibly arise.

Aim of this study

This study aims to determine the relationship between social support and childhood maltreatment among patients with schizophrenia.

Research questions

Q1: What is the relationship between social support and positive and negative symptoms of schizophrenia?

Q 2: What is the relationship between childhood maltreatment and positive and negative symptoms of schizophrenia?

Q3: What is the relationship between social support and childhood maltreatment among patients with schizophrenia?

Subjects and Methods:

Research design

A correlational descriptive study design was utilized in this study.

Subjects

A purposive sample of all patients diagnosed with schizophrenia from both genders (102) present at inpatient psychiatric units in El-Azazi Hospital for Mental Health at the time of the data collection were recruited.

Research Setting

This study was conducted at El-Azazi Hospital for Mental Health in Abo-Hamad City, Sharqia Governorate, Egypt which is affiliated to the Ministry of Health. This hospital accommodates about 250 beds for mentally ill and addiction cases. It consists of 10 departments divided into four parts which are:(1) Three outpatient clinics; one for psychiatric patients, one for addiction and the third for children; (2) inpatient psychiatric units; three for males and one for females; (3) One unit for electroconvulsive therapy; and (4) Two units for drug addiction.

Tools of data collection:

Four tools were utilized for collecting data of this study. They were:

1- Socio-demographic data sheet:

It includes both personal information as; age, gender, educational level and marital status, father and mother state, and clinical information as; age at onset of disease, duration of disease, length of hospitalization, smoking state, and family history of schizophrenia.

2- Positive and Negative Syndrome Scale (PANSS):

This scale was developed by **Kay, Opler, & Fizban, (2000)** to assess symptoms of psychosis. It consists of 30 items divided into three sub-scales which are positive symptoms (7 items) (e.g.,hallucinations, delusions); negative symptoms (7 items) (e.g., flat affect, avolition); and general psycho-pathological subscale (16 items).

Scoring system:

The total scale items are rated on 7-points Likert scale ranging from (0) means absent to (6) means extreme. The scale is proven to have a good level of reliability as Cronbach's alpha was 0.85 for positive symptom subscale, 0.83 for negative symptom subscale, 0.85 for general psycho-pathological subscale, and 0.90 for the total scale.The symptoms are classified according to severity into mild (30-90), moderate (91-150) and sever (151-210).

3-Childhood Traumatic Questionnaire (CTQ): Developed by **Fu, Lin, & Fei, (2005)** to assess the retrospective experience of childhood trauma (neglect and abuse). It is composed of 25 items divided into five subscales (each subscale contains 5 items as follows; emotional, physical and sexual abuse and emotional and physical neglect.

Scoring system:

Items of this questionnaire were rated on 5-points Likert scale ranging from (1) means never true to (5) means very often true. The CTQ total score ranged from 25 to 125. This scale is classified according to occurrence of abuse behaviour into no or minimally maltreated when the total score is (25-50) and maltreated when total score is (51-125). The scores of each subscale's items are summed to constitute the score of the subscale and the sum of five subscales represents the score of the total trauma questionnaire. The higher scores indicated higher levels of trauma exposure (maltreatment) experienced. The questionnaire has some reversed items; item 2 and 5 in physical neglect subscale and the total items of emotional neglect subscale, which are rated as (1) means very often true(5) means never true. This scale has good level of reliability in many previous studies as well as in this study as the Cronbach's alpha was found to be 0.92.

4-The Multidimensional Scale of Perceived Social Support (MSPSS):

This scale was developed by **Zimet, Dahlem, & Farley, (1988)** to assess perceived social support from three specific sources. It consists of 12-item divided into three subscales; social support from family; friends; and significant others. Each subscale has 4 items.

Scoring system:

Items of this scale are rated on a 7-pointLikert scale, ranging from (1) means very

strongly disagree to (7) means very strongly agree. A higher score indicates better social support. This scale is classified into high social support level score =>60% (56-84) and low level score <60% (12-55). The score of the total items is summed to constitute the total scale score. This scale has been proven to be a valid and reliable tool in many previous studies. The Cronbach's alpha in this study was found to be is 0.92.

Pilot study:

Before starting the actual study, the researchers conducted a pilot study on 10% of the studied patients. It was done to test the clarity and feasibility of the tools, as well as the estimated time to be completed. According to the result of the pilot study, the tools did not need any modification, so patients who shared in the pilot study were included in the main study sample.

Content validity & reliability

Content validity of the utilized tools was established by five experts in psychiatric nursing, psychiatric medicine and statistics.They revised the tools for applicability, clarity, comprehensiveness, understanding, relevance, and ease for implementation. The researchers translated the study tools into Arabic language using the translation-back translation technique to ensure their original validity. Reliability of the tools was assisted by Cronbach's alpha test in the statistical package for social science (SPSS) version 20. They showed good level of reliability.

Field work

After obtaining the required permission to conduct the study, the researchers met with director and head nurses of the hospital and explain to them the aim of the study in order to obtain their consent and gain their cooperation to proceed into data collection. The selected patients were interviewed by the researchers to obtain their verbal consent to participate in the study after being informed about its aim. The researchers tried to establish trusting relationship with the selected patients before starting data collection. They interviewed each patient individually in separate room in the psychiatric ward and explained each question to him/her clearly then filled in the selected answer. Each sheet took about 45-60 minutes to be completed according to the patient's level of concentration, understanding and ability to respond to each question. The number of patients interviewed per day ranged from 2 to 5 patients. Data collection took about six months to be completed (two days per week) from the beginning of June to the end of November 2019.

Administrative and Ethical considerations

The researchers secured an official permission by submitting an official letter issued from the Dean of Faculty of Nursing-Zagazig University to the Director of the selected hospital to obtain permission to carry out the study. Patients' voluntary participation in the study was confirmed. Confidentiality of the collected data was established and patients were ensured that it would be only used for the purpose of the study.

Statistical Analysis

All data collected were tabulated and statistically analysed using the SPSS version 20.0 for windows (SPSS Inc., Chicago, IL, USA 2011). Quantitative data were expressed as the mean ± SD and minimum-maximum qualitative data were expressed as absolute frequencies (number) and relative frequencies (percentage). Percent of categorical variables were compared using the Chi-square test. Spearman's rank correlation coefficient was calculated to assess relationship between various study variables, (+) sign indicates direct correlation and (-) sign indicates inverse correlation, also values near to 1 indicate strong correlation & values near 0 indicate weak correlation. All tests were two-sided. P-value ≤ 0.05 was considered statistically significant (S), and p-value > 0.05 was considered statistically insignificant (NS)

Results

Table (1) shows that 63.7% of studied participants were male with a mean age of 37.7± 11 years. Educational level was intermediate among 35.3% of the studied patients and 68.6% of them were unmarried. Participants' fathers were died among 56.9% of them, however mothers were living among 61.8% of them. More than half (55.9%) of patients were smokers and 71.6% have no family history of schizophrenia. Moreover, the same table displays that the age at the onset of the disease ranged between 12-52 years with a mean 27.4±8.7 years. The mean duration of disease mean was 10.2±9.7 years among the studied patients and that of length of hospitalization was 2.4±1.6 months.

Table (2) shows that the highest percent score of childhood maltreatment among studied patients was emotional neglect (60.7%) with a mean of 14.8±4.6, while the lowest percent was sexual abuse (11.8%) with a mean of 7.7±4. The same table also shows that 84.4% of patients had moderate to severe level of positive symptoms with a mean of 26.5±8, half (50.0%) and 63.7% of studied participants had moderate negative and general psychological symptoms with a mean of 26.8±7 and 50.7±13 respectively. Perceived family and significant others' social support were high 55% & 56% of participants with a mean of 17±5.7 and 18±5.8 respectively. However, majority of patients (87.3%) were low in perceiving friend social support with a mean of 10±6. Perceived total social support level was low among 73.5% of patients with a mean of 45±14 as revealed by table (2) and figure (1).

Table (3) shows that there was statistically significant difference between friend support and both family support and significant others support ($p<0.05$).

Table (4) shows that, 78% of female patients were maltreated during their childhood. Also, the highest percent of patients among all educational levels were maltreated during childhood. Moreover, 73% of patients who have no family history of schizophrenia were maltreated during childhood. The same table reveals that 84% of married and 80% of non-smoker patients were maltreated. There were no statistically significantly relationships between demographic characteristics and childhood maltreatment ($p>0.05$) except with marital status and smoking habits of patients with schizophrenia ($p=0.02$ and 0.03 respectively).

Table (5) shows that 74% of male patients experienced low level of social support. The highest percent of all educational levels among studied patients experienced low level of social support. Also, 74% of unmarried patients experienced low level of social support. Moreover, 77% of patients with living father and 74% of them with died mother experienced low level of social support. Low level of social support was observed among 77% of smokers and 83% of patients with family history of schizophrenia. There were no statistically significant relationships between demographic characteristics and social support of patients with schizophrenia ($p>0.05$).

Table (6) shows that total positive symptoms was statistically significantly positively correlated with total negative symptoms, total general psychological symptoms, and total CTQ ($p<0.05$). Also, total general psychological scale was statistically significantly positively correlated with total CTQ and total social support, while negatively correlated with total social support ($p<0.05$). The same table also reveals that there were statistically significant negative correlations between total social support and total CTQ ($p<0.05$).

Figure (2) illustrats that statistically significantly negative correlation was found between social support and physical abuse ($p<0.05$).

Figure (3) indicates that statistically significant negative correlation was found between social support and physical neglect ($p<0.05$)

Figure (4) illustrated that statistically significant negative correlation was found between social support and emotional abuse ($p<0.05$)

Figure (5) illustrats that statistically significantly negative correlation was found between social support and emotional neglect ($p<0.05$)

Table (1): Demographic and clinical characteristics of schizophrenic patients

Variables	Mean± SD	Min-Max
Age (in year)	37.7±11	18-67
gender	**Number**	**Percent**
Male	65	63.7
Female	37	36.3
Educational level		
Illiterate	29	28.4
Read and write	24	23.5
Intermediate education	36	35.3
High education	13	12.7
Marital status		
Married	32	31.4
Unmarried	70	68.6
Father state		
Died	58	56.9
Lived	44	43.1
Mother state		
Died	39	38.2
Lived	63	61.8
Smoking		
Non smoker	45	44.1
Smoker	57	55.9
Family history of schizophrenia		
No	73	71.6
Yes	29	28.4
Clinical variables	**Mean± SD**	**Min-Max**
Age at beginning of disease (onset) (in year)	27.4 ±8.4	12-52
Duration of disease (in year)	10.2±9.7	0.25-40
Length of hospitalization (in month)	2.4±1.6	1-8

Table (2): Frequency Distribution of Level of Childhood Trauma Questionnaire, PANSS Scale, and Social Support Scale Among patients with schizophrenic.

Scale	No (%)	Mean ± SD
Sexual abuse (SA)		
No or minimal	90 (88.2)	7.7±4
Present	12 (11.8)	
Emotional abuse (EA)		
No or minimal	57 (55.9)	11.6±5.3
Present	45(44.1)	
Emotional neglect (EN)		
No or minimal	40 (39.3)	14.8±4.6
Present	62 (60.7)	
Physical abuse (PA)		
No or minimal	63 (61.8)	11±5.5
Present	39 (38.2)	
Physical neglect (PN)		
No or minimal	66 (64.7)	11.4±3
Present	36 (35.3)	
Positive scale		
Mild	16 (15.6)	26.5±8
Moderate	43 (42.2)	
Severe	43 (42.2)	
Negative scale		
Mild	11 (10.8)	26.8±7
Moderate	51 (50.0)	
Severe	40 (39.2)	
General psychological scale		
Mild	28 (27.5)	50.7±13
Moderate	65 (63.7)	
Severe	9 (8.8)	
Family Social Support		
Low level	46(45)	17 ± 5.7
High level	56(55)	
Friend Social Support		
Low level	89(87.3)	10±6
High level	13(12.7)	
Significant Others Social Support		
Low level	45(44)	18±5.8
High level	57(56)	
Total social support level		
Low level	75 (73.5)	45±14
High level	27 (26.5)	

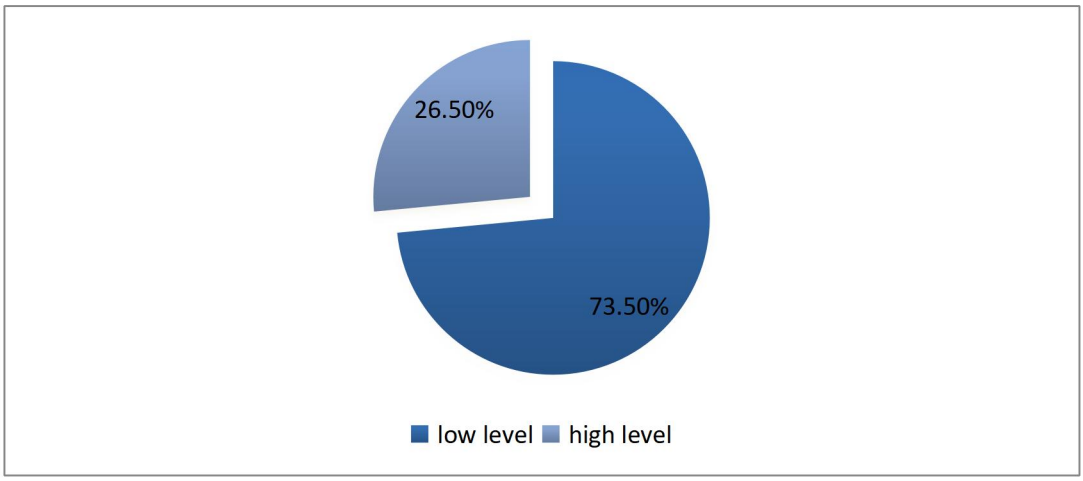


Figure (1): Percent Level of Total Social Support of Patients with Schizophrenia

Table (3): Frequency Distribution of Level of Family, Friend and Significant Others Social Support Level of Patients with Schizophrenia

Social support level	Family support No(%)	Friend support No(%)	Significant Others support No(%)	Cochran's Q	p- value
Low level	46(45)	89(87.3)	45(44)	66.2	0.00001*
High level	56(55)	13(12.7)	57(56)		

(*) significant at p<0.05

Table (4): Association Between Demographic Characteristics and Total Childhood Trauma Questionnaire of Patients with Schizophrenia

Variables	Total CTQ Yes No (%)	No No (%)	χ^2	P-value
Gender				
Male (65)	41 (63)	24 (37)	2.6	0.1
Female (37)	29 (78)	8 (22)		
Educational level				
Illiterate (29)	21 (72)	8 (28)		
Read and write (24)	14 (58)	10 (42)	1.8	0.6
Intermediate education(36)	25 (69)	11 (31)		
High education (13)	10 (77)	3 (23)		
Marital status				
Married (32)	27 (84)	5 (16)	5.4	0.02*
Others (70)	43 (61)	27 (39)		
Father state				
Living (44)	26 (59)	18 (41)	3.3	0.07
Died (58)	44 (76)	14 (24)		
Mother state				
Living (63)	42 (66.7)	21 (33.3)	0.29	0.59
Died (39)	28 (71.8)	11 (28.2)		
Smoking				
Non-smoker (45)	36 (80)	9 (20)	4.8	0.03*
Smoker (57)	34 (60)	23 (40)		
Family history of chizophrenia				
No (73)	53 (73)	20 (27)	1.9	0.19
Yes (29)	17 (59)	12 (41)		

(*) significant at p<0.05

Table (5): Association between demographic characteristics and Total Perceived Social Support of schizophrenic patients

Variables	Total Perceived Social Support			
	Low level	High level	χ^2	P
gender				
Male (65)	48 (74)	17 (26)	0.009	0.9
Female (37)	27 (73)	10 (27)		
Educational level				
Illiterate (29)	25 (86)	4 (14)		
Read and write (24)	16 (67)	8 (33)	3.4	0.3
Intermediate education (36)	25 (69)	11 (31)		
High education (13)	9 (69)	4 (31)		
Marital status				
Married (32)	23 (72)	9 (28)	0. 07	0.8
Others (70)	52 (74)	18 (26)		
Father state				
Living (44)	34 (77)	10 (23)	0.55	0.45
Died (58)	41 (70.7)	17 (29.3)		
Mother state				
Living (63)	46 (73)	17 (27)	0.02	0.88
Died (39)	29 (74)	10 (26)		
Smoking				
Non-smoker (45)	31 (69)	14 (31)	0.9	0.3
Smoker (57)	44 (77)	13 (23)		
Family history of schizophrenia				
No (73)	51 (70)	22 (30)	1.8	0.18
Yes (29)	24 (83)	5 (17)		

Table (6): Correlations Among Studied Variables of Patients with Schizophrenia

Variables	Positive scale		Negative scale		General psychological scale		Child maltreatment	
	r	P	r	P	r	P	r	p
Total Total negative scale	**0.2**	**0.03***						
Total general psychological scale	**0.58**	**0.0001***	**0.47**	**0.0001***				
Total childhood trauma questionnaire	**0.28**	**0.004***	**-0.03**	**0.77**	**0.35**	**0.0001***		
Total Perceived Social Support	**-0.16**	**0.1**	**-0.09**	**0.4**	**-0.23**	**0.02***	**-0.41**	**0.0002***

(*) significant at $p<0.05$

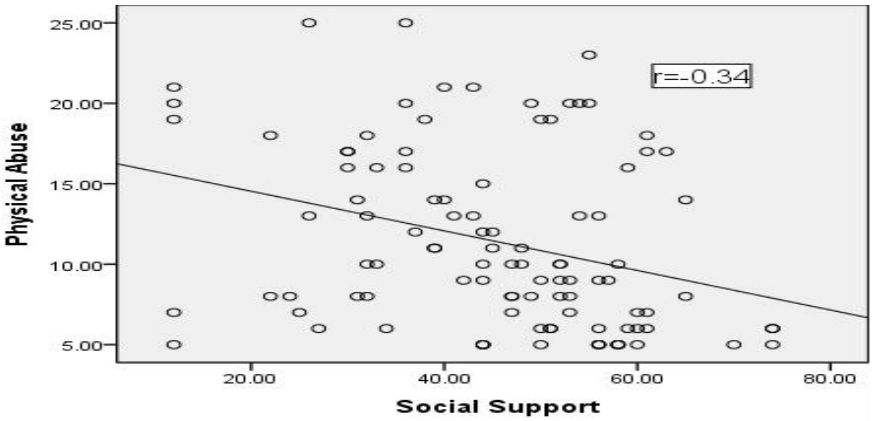


Figure (2): Correlation between social support and physical abuse of patients with schizophrenia

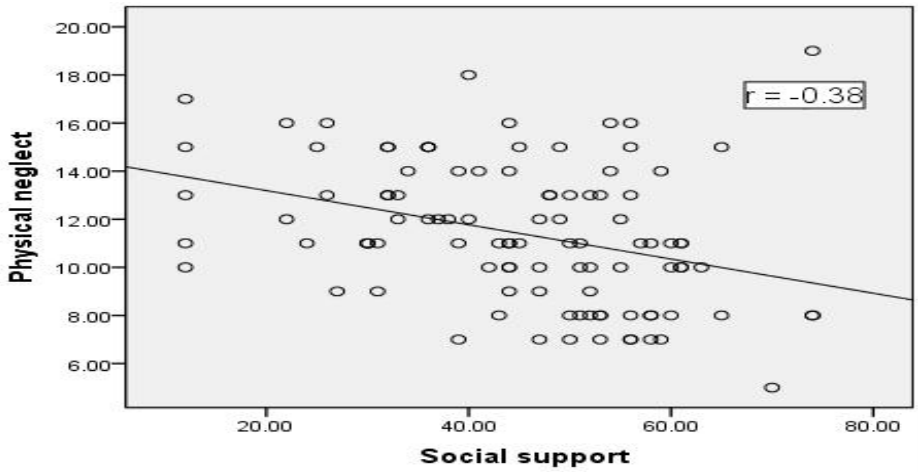
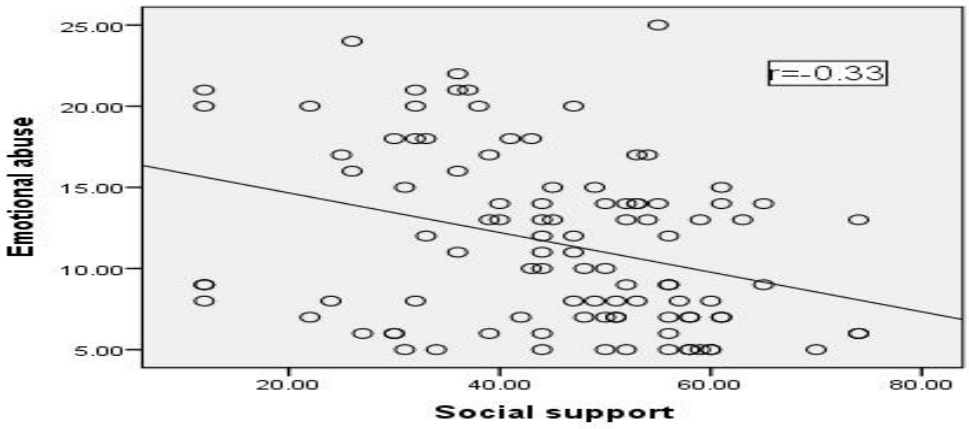


Figure (3): correlation between social support and physical neglect of schizophrenia patients



Figure(4): correlation between social support and emotional abuse of schizophrenia patients

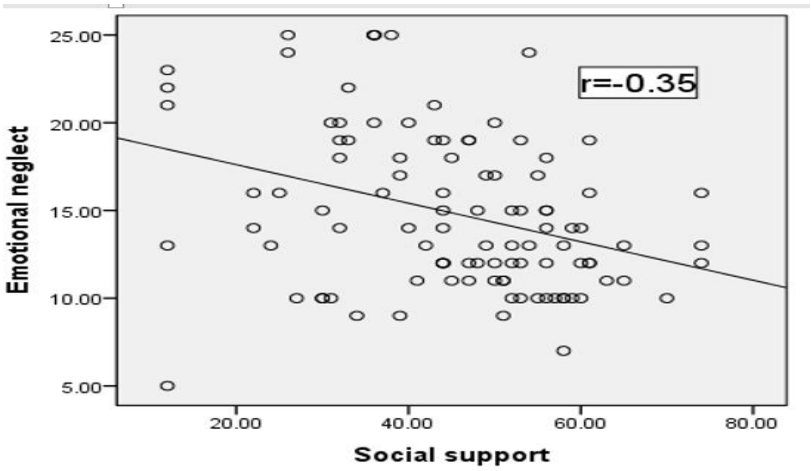


Figure (5): Correlation between social support and emotional neglect of patients with schizophrenia

Discussion

Childhood maltreatment (CM) is one of the most serious risk factors for the development of physical or mental illness **(Hughes et al., 2017).** CM is frequently reported to be more prevalent in individuals with schizophrenia spectrum disorders, with rate as high as 85% (**Larsson et al., 2013).** Many factors can influence the likelihood of getting schizophrenia. These characteristics include an individual's perception of social support, which has a significant impact on treatment readiness **(Gross, et al., 2016).** The current study was conducted to determine the relationship between social support and childhood maltreatment among patients with schizophrenia.

As regards demographic and clinical characteristic of studied patients, more than three fifths of studied participants were male with a mean age of 37.7± 11. The mean age of patients at the beginning of the disease was 27.4 ±8.4 years. The duration of disease mean among studied patients was 10.2±9.7 years. This may be related to the early onset of schizophrenia and its prevalence which is 1.4 times more in men than in women and may also be due to the nature of the society and stigma that prevent the female from visiting the mental health clinic and hospital. This result agrees with that of **Chaurotia, Verma, & Baniya (2016)** who studied psychosocial factor related to relapse in schizophrenia, and found that majority of patients were male.

The current study revealed that the highest percent of participants' education was intermediate. This may be related to early onset of the disease and inability to complete their education. Moreover, the current study results found that more than two thirds of patients were unmarried (single or divorced). This may related to the effect of symptoms on patients making them unable to sustain in work or in a relationship with spouse. This result agrees with **San et al., (2013)** study of factors associated with relapse in patients with schizophrenia, they found that 73.3% of patients were unmarried and 12.2% were divorced. On the contrary, a study by **Chaurotia, Verma, & Baniya (2016)** revealed that, most of studied patients were married.

More than half of participants' fathers were died however more than three fifths of their mothers were living. This study result indicated that most patients lived with single parent, which may add pressure and stress on all family members including the patient. The

results of this study also indicated that, more than half of patients were smokers. This may be related to that the number of men were more than that of women in the studied participants. As well, one possible explanation is that people with schizophrenia use tobacco to manage some of their illness' symptoms and lessen some of the adverse effects of their medication. This result agrees with that of **Abu Nazel et al., (2017)** who studied tobacco smoking among mentally ill patients in Egypt, found that majority of patients were current smokers.

Emotional neglect was the most experienced type of childhood maltreatment among studied patients followed by EA, PN, PA, and SA. This result may be due to increased financial burden on parents, which makes them busy most of the time making a living and not having enough time to care for their children, which may increase the child's feeling of neglect by his/her parent. Furthermore, the experience of childhood physical or sexual abuse could be enough to overwhelm coping resources, arouse severe physiological and psychological distress and finally lead to psychosis. This is in agreement with **Rey, et al., (2017)** who found that, most patients treated at public mental health and substance abuse hospitals are individuals with histories of sexual abuse; domestic violence; child abuse; neglect; and interpersonal violence during their childhood.

Moreover, the previous findings are in line with that of a study in China, about childhood trauma in patients with bipolar disorder and schizophrenia, revealed that, patients with mental disorders experienced more severe childhood trauma and EN was the most reported type of trauma, while SM was least reported type **(Xie et al., 2018).** As well, **Roussos et al., (2016)** found that, exposure to different types of childhood trauma such as physical/sexual abuse was a significant risk factor for psychotic disorder. However, this result disagrees with that of a study on Chines patients with schizophrenia revealed that PN was the most reported type of child maltreatment by their patients, followed by EN, SA, EA, and PA **(Li et al., 2015)**. The differences in culture may interpret the difference in results.

The cultural difference in the reaction to trauma in Egypt is an interesting issue and can be summarized in the following points. First, the behavior of individuals in Arab culture is determined by the group rather than the behavior of individuals as in Western cultures, where the source of control is external rather than internal. Hostility is also curtailed both in the family and outside, through the attitude of "Maalesh", which means "never mind". Secondly, religion is the focus of self-perception of Muslims, and people with strong religious backgrounds believe that all things that happen to a person, whether good or bad are the will of Allah. Thirdly; in the Arab culture, the application of the method of authoritarian punishment to children is considered a normal duty for parents and teachers **(El-Wasify, Amin, & Roy, 2010).**

The results of current study revealed that, more than three fifths of male and more than three quarters of female patients were maltreated during childhood. This means that female participants reported higher levels of abuse than male participants, this finding is consistent with **(Kelly et al., 2016).** However, there was no difference observed in the relationships between childhood trauma and gender. This result agrees with that of **Shannon et al., (2011)** whose study on childhood trauma and memory functioning in schizophrenia found no significant differences in sex for those with moderate to high trauma exposure compared to those with low or no trauma. As well, **Hauga et al., (2015)** study on childhood trauma in first-episode schizophrenia found no gender difference as regards childhood trauma.

Incongruent with the previous findings, **Gayer-Anderson et al., (2015)** who studied gender differences and their relation with child abuse, social support and psychosis, they found significant differences between men and women in the associations with reported abuse and high probability of psychosis in women who reported physical or sexual abuse. Similarly, a study of **Vahl et al., (2016)**, on gender effects in

populations with childhood trauma histories have found that specific kinds of abuse can lead to different symptom exhibitions depending on whether the affected individual is male or female; for instance, sexual abuse is connected with marked internalizing symptoms in females, while it is related to marked externalizing symptoms in males.

The current study result showed statistically significant difference between marital status as regards child abuse. The highest percent among abused patients was married. As well, there is statistically significant difference between smoking and non-smoking patients as regards child abuse. The highest percent among abused patients are nonsmokers. This finding may be due to that childhood abuse and neglect are known to be associated with significantly higher rates of psychiatric morbidity in adults but are not typically thought to be risk factors for the onset of smoking. This result agrees with the study of **Rey et al., (2017)** about clinical characteristics of schizophrenia smokers, identified that nicotine dependence was associated with history of childhood trauma in schizophrenia.

The current study results revealed that total CTQ was statistically significantly positively correlated with total general psychological symptom scale and total positive symptom scale. This means that with increasing experience of childhood maltreatment, there is increasing in severity of positive and general psychological symptoms among patients with schizophrenia. These results agree with **Mørkved et al.,(2018)** who found more frequent moderate to severe levels of physical and sexual abuse and physical neglect in patients with psychosis as compared to patients with other mental health disorders. They also found psychosis-like symptoms were related to the CTQ-SF sum score. As well, **Pruessner et al., (2018)** study of gender differences in childhood trauma in first episode psychosis revealed that, emotional abuse had the strongest predictive value for positive symptoms.

Moreover, **Løken and Reigstad (2012)** study of relations between childhood trauma and adult psychological symptomatology showed that childhood abuse contributes to general psychological distress, interpersonal problems and emotion regulation problems. They found that childhood sexual abuse has a significant impact on symptomatology.

The current study revealed that perceived social support level among majority of patients with schizophrenia is low. This finding may be attributed to stigma and discrimination, which have a direct effect on the social opportunities of people with schizophrenia. A probable reason to explain the smaller network sizes among the studied sample is that patients with schizophrenia enforce a great burden on their caregivers. As mental disorders progress, mentally ill patients lose those members of their networks, may be due to that caretakers' burnout, making the networks smaller and ultimately causing more networking crisis.

This result agrees with **Xie et al. (2018),** who found that, patients with mental disorders experienced poorer social support compared with healthy controls. As well, **Eweida, Maximos, & Sharaf (2017)** indicated that, half of the studied subjects reported that they didn't have social support in their life. Moreover, **Mahmoud, Berma, & Gabal (2017)** study of relationship between social support and the quality of life among psychiatric patients in Egypt, revealed that more than half of their studied patients had low social support level.

The current study results showed that, the highest mean score of perceived social support as reported by participants was from significant others, followed by family and the lowest perceived social support was from friends. There was statistically significant difference between support from three sources (friends, family and significant others support). This may be explained by that, significant others may include any special person in the patient's life, such as a close friend, therapist, psychiatric nurse or clerk who supported psychiatric patients more than their family members. This result can also be attributed to that participants were selected from inpatient department and at this time, support from their

families increased. Family ties are strong in Arabic countries and can be used as support rather than pressure. Mentally ill patients either live with their families, including parents, spouses, siblings, and children or have regular ongoing contact with their families.

The previous result is consistent with that of **Mahmoud, Berma, & Gabal (2017)** who found that a highest social support perceived by a psychiatric patient was from significant others, followed by family members, and the lowest perceived social support was from friends. This is contradictory with **El-Azzab, & Ali (2021)**who found the highest level of social support for psychiatric patient was from his family followed by significant other and friends.

The lowest perceived social support was from patients' friends in the current study, this may be due to severity of symptomatology, public and internalized stigma among patients with schizophrenia that leads to cut the patients' relationship with their friends therefore, they perceived no support from them. This result congruent with an Egyptian study of Eb**rahim, El-Bilsha, & Elhadidy (2021).**

The current study result revealed that with increasing general psychological symptoms in patients with schizophrenia, they perceived less social support. This result may be attributed to the illness characteristics and changes in their affect, which contribute to difficulties in relating socially and thus to the reduction of social networks with the other patients inside the hospital. Additionally, the stigma of mental illness may cause the patients' friends to withdraw from their network. This result was consistent with that of **Gayer-Anderson et al., (2015)** who found that psychotic patients are more socially isolated and perceived themselves as having less support.

The current study finding revealed no significant correlation between perceived social support and negative or positive symptom scale. This result contradicts with that of **Chaurotia, Verma, & Baniya (2016)** who found that, subjects with initially impaired social skills had significantly higher levels of negative symptoms.

In agreement with the result of **Gayer-Anderson et al., (2015)**, finding of the current study revealed no statistically significant difference between sexual abuse and social support among patients with schizophrenia. However, it contradicted with **Eweida, Maximos, & Sharaf (2015)** in that the current study revealed that statistically significantly negative correlation was found between social support and emotional neglect, emotional abuse, physical neglect, physical abuse, and total child abuse among patients with schizophrenia.

Limitation of the stuy

We can't generalize results of this study to all schizophrenic patients because of small sample size . Future research is recommended with larger sample and for all types of mental disorders.

Conclusion

Based on the findings of the current study, it is concluded that, emotional neglect was the highest and sexual abuse was the least types of childhood maltreatment experienced by the studied patients. Patients with schizophrenia perceived more social support from significant others, followed by family, and friends. There were statistically significant negative correlations between perceived social support and general psychological scale and CTQ. However, there were statistically significant positive correlations between CTQ, and positive scale and general psychological scale

Recommendations:

- The nurse should design strategies to strengthen the linkages between the patient's professional and personal social networks. This can be achieved through family therapy, where patients' families meet together for the purpose of sharing information and gaining social support.
- There is a great need to establish programs for families of patients with schizophrenia to

increase their understanding of the nature of illness and their support of their patients.
- Trauma-focused psychological interventions for patients with schizophrenia should be developed and routinely offered to patients.
- A training program for nurses about the importance of social support for mentally ill patients and their families during difficult times is recommended.
- Further research is required using a larger sample size and data collected from childhood to adulthood to fully ascertain the role of social support in increasing resilience to psychosis after child maltreatment.

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