

Association between Burden of Care, and Resilience among Family Caregivers Living with Schizophrenic Patients

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Abstract

Aim: The purpose of this research was to assess association between burden of care, family functioning and resilience among family caregivers living with schizophrenic patients. **Methods:** This study was a descriptive study was done for 110 family caregivers living with schizophrenic patients. **Setting:** the study was conduct at outpatient clinic affiliated to Abbassia hospital. The data collection include four tools: socio-demographic questionnaire, Family Adaptability and Cohesion Scale II (FACES- II), The Caregiver Burden Inventory, and Family Resilience Assessment Scale. **Results:** most of family caregivers were female. 44.5% of family caregivers had level of adaptability and cohesion, 53.6% of family care givers had low resilience level and 55.4% experience moderate to severe burden. **Conclusion:** Family caregivers experience moderate to severe burden have low family function and low level of resilience. The present study recommended that implementing of counseling intervention for promoting resilience among family caregivers of schizophrenia

Key words: family caregivers- burden – Resilience - adaptability –cohesion

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I. Introduction

Schizophrenia is a severe mental illness estimated to affect 1 out of 100 people globally .It is a leading contributor to the global burden of disease accounting for about 1% of disability-adjusted life year, 3% of year lived with disability and is the 8th leading cause of disability in people aged 15to 44 years (**Adeosun2013**).The impairment caused by schizophrenia limits the ability of the patients to remain independent in various domains of psychosocial functioning. Patients with schizophrenia, therefore, require long-term support and care which may become burdensome to their family caregivers. **Pun., He.,and Wang (2014)**.

Family caregiver burden is a psychological state that appears as a combination of physical and emotional work, social pressure, and financial restrictions which are consequences of taking care of a patient. **Alejandra et al., (2011)**.

Family functioning that he refers to as protective factors, namely family cohesiveness, and flexibility in the family as a system. Both these processes have the same purpose, which is to achieve balance in the family. **Puasiri,et al.,(2011)**.family resilience as the ability to “withstand and rebound from disruptive life challenges as well as family resilience is the process of making meaning of adversity. by reducing the tendency to blame, shame and pathologies by viewing their situation as being normal, the family may be better equipped to make meaning of their experience. **Walsh (2012)**.

The impact of schizophrenia on the lives of patients and their families is indeed demanding and difficult. This is so because Schizophrenia fits into the definition of catastrophic stress. **Shrama (2014)**

According to (**BISHOP2014**) Caring for a family member with schizophrenia may place a burden on the family and many families are forced to adapt their lifestyle and functioning during a potentially stressful period. This stressful experience can be recognized as a crisis. To overcome a crisis, it is believed that the family should adjust function therefore be resilient as a family unit

Significant of the study

Schizophrenia is a severe mental illness, which is stressful not only for the patients, but also for family members. Family caregivers of persons with Schizophrenia suffer from significant stress, experience moderately high levels of burden and often receive inadequate assistance from mental health professionals.

Abu Shair ,and Eljedi (2015)

The world health organization (**2014**) has estimated that about 40-90% of patients with schizophrenia live with their families. Family caregivers play a major role in recovery of patients with schizophrenia by ensuring and maintains of life stability and prevention of relapse in the community.

Family caregivers of individuals with schizophrenia encounter comprehensive care giving challenges that cause physical, as well as Changes in the family functioning. Such impacts may deteriorate the daily functioning of family caregivers and quality of care giving, which in turn increases the risk of decline of progress in people with schizophrenia. Family members of persons with schizophrenia may tolerate considerable stress and burden that can compromise their own health and quality of life and impair the functioning of the family. However, if family members are resilient, they can overcome stress associated with providing care for a loved one with schizophrenia, and preserve their own health and the health of their family. So that this study aiming to assess association between burden of care, family functioning and resilience among family caregivers living with schizophrenic patients

Aim of the study

This study aim to assess association between burden of care, family functioning and resilience among family caregivers living with schizophrenic patients

Research hypothesis:

1. There will be positive relation between burden of care and family function.
2. There will be positive relation between burden of care and family resilience.

Study design: descriptive correlation study

Setting: this study was conduct at outpatient clinic affiliated to Abbassia hospital.

Study sample : sample of this study comprised 110 family caregivers' schizophrenics' patients in outpatient clinic. Inclusion criteria for this study included: those who were bearing the primary responsibility of patients .older than 20 years old taking care of a patient who is on medication and on regular follow up in outpatient clinic for the past 6 months and; primary caregiver for at least last 12 months, agreeing to participate in the study after being informed about it.

Tools for data collection:

1- Socio demographic questionnaire

The questionnaire included two main parts

- Socio demographic characteristics of schizophrenics' patients such as: age, duration of illness, numbers of previous hospital admission, and residence place
- Socio demographic characteristics of family caregivers such as: sex , relationship ,educational level ,and duration of care giving

2-Family Adaptability and Cohesion Scale II (FACES- II)

The FACES-II was developed by **Olson, Bell, & Portner, (1982)**. to evaluate the adaptability and cohesion dimensions in family interactions. FACES-II is a 30 items was divided into 16 items regarding cohesion assess concepts such as emotional bonding, family boundaries, coalitions, friends, time space, and decision-making. 14 items that assess the adaptability concepts of assertiveness, leadership, discipline, negotiations, roles, and rules

Scoring

Each item, rating how frequently a behavior occurs in the family, is scored on a 5-point Likert scale:

1=Almost Never, 2 =Once in Awhile ,3=Sometimes ,4=Frequently and 5=Almost Always

Cohesion items scores can range from 16 to 80 and adaptability scores can range from 14 to 70.**the score of subscale was summing and categorized as following**

30:70 = mild adaptability and Cohesion ,

71:110= moderate adaptability and Cohesion

111 :150 high adaptability and Cohesion

3-The Caregiver Burden Inventory (CBI)

The caregiver burden inventory (CBI) is developed by (Novak and Guest, 1989). It is a multidimensional instrument designed to assess caregiver's burden. It consists of 5 dimensions: time-dependence burden (5 items), developmental burden (5 items), physical burden (4 items), social burden (5 items), and emotional burden (5 items).

Scoring

Each item was rated on four point Likert scale: 0 =Never.1 = Rarely.2 = Sometimes.3= Quite Frequently. 4= Nearly Always. The maximum total score for each dimension is 20, except for physical burden, which is 16. Scores can range from zero to 96.

0 :24 = little or no burden

25 : 45 = Mild to Moderate burden;

46 : 66 = Moderate to Severe burden;

66 to 96 = Severe burden.

4-Family Resilience Assessment Scale (FRAS)

It was developed by **Sixbey (2005)** to assess family resilience it consists of 54 statements classified into six factors:

- Family communication and problem-solving: 27 items
- Utilizing social and economical resources: 8 items
- Maintaining a positive outlook: 6 items
- Family connectedness: 6 items
- Family spirituality: 4 items
- Ability to make meaning of adversity: 3 items

Scoring

Each statement rate on a 4-point Likert scale, ranging from strongly agrees, agree, disagree, and strongly disagree. Total family resilience range between 54 and 216; lower scores indicate little resilience within the family, while higher scores indicate high levels of resilience in the family.

- Low family resilience: 54:108
- Moderate family resilience: 109: 162
- High family resilience: 163:216

Field work

At the beginning, the researcher introduced herself and briefly explained the study objectives to family caregivers. The process of data collection was carried out in the period from June 2017 to the end of August 2017., the researcher attended out-patient clinic from 9.00 am to 1.00pm.for three days/ week to collect data.

Ethical consideration:

The ethical research considerations in this study included the following: The research approval obtains before conduct study. Subjects are allowed to choose to participate or not participates 'voluntary participation' and they have the right to withdraw from a study any time without penalty.

The researcher describes the objective and aim of the study to family caregiver. Maintain confidentiality and anonymity for every selected caregiver who involved on the study sample.

Clarifying that all information will be used for scientific research only

Statistical analysis

Statistical Package for the Social Sciences (SPSS) 16 was used to conduct analyses. The following statistical measures were used: a) Descriptive measures including count, percentage, mean and standard deviation. b) T-test to compare two independent means. c) One way analysis of variance The level of significance selected for this study was p equal to or less than 0.05.

II. Results

Table (1) the table shows that the highest percent of patients (59%) were females. The mean age of patients was 32.90 ± 8.87 . more than one third of patients are single (37.3%) and had been not work. About educational level 41.8% were read and write. Regarding to job more than one third the greatest proportion of patient (32.7%) not work .concerning to the Length of mental illness more than half of patients 52.7% was 1 year to 5 years. About the numbers to previous hospitalization 56.4% have been hospitalized three times. Finally the table shows that most patients have been use more than two drugs per day 82.7%.

Table (2) the table shows that approximately two third more half of caregivers 62.7% were females and 24.5% were mother. Concerning the job 41.8 % are house wife .The mean age was(35.35 ± 8.270).Regarding to education level 55.4% was read and writes. as regard to awareness of patient illness the greatest proportion more than two third of caregiver not aware by patient's illness 68%.lastly 61.8% of family caregivers have not enough income.

Table (3) the table displays that the highest percent 82.7% and 56.4% of family members they are never flexible in handle difference among them and not know rules among them .Concerning to cohesion sub items 83.6 % and 82.7% of family member never avoid each other at home and try new ways of dealing with problems .

Table (4): The table clarified that 44.5% of family caregivers have low level of adaptability and cohesion. There was highly significant difference

Table (5) the table shows in response time dependency sub items 72% mentioned that their patient frequently need help to perform many daily tasks. About developmental burden 100 % of family members

frequently feel emotionally drained due to caring for their patients. Concerning physical burden 100% of family members reported they are always physical sick .regarding to social burden 47.3% of family members frequently I don't do as good a job at work as I used to. Finally 65.5 % always feel embarrassed by my patient behavior in response to emotional burden

Table (6) the table clarified that 55.4% experience moderate to severe burden. There was highly significant difference.

Table (7) the table explains that 81.9% of family members agree that they feel good giving time and energy to our family meanwhile 76.6% disagree that they can deal with family differences in accepting a loss in response to Family communication and problem-solving sub items. Concerning to maintaining a positive outlook sub items 65.5% of family members disagree they define problems positively to solve. About family spiritually 90.1 %strongly agree they seek advice from religious advisors. Concerning to family connectedness 88.2% strongly agree that they show love and affection for family members. Regarding utilizing social and economical resources the table displays that 90.1% strongly agree they know there is community help if there is trouble. Finally 56.4% of family members agree that accept stressful events as part of life in response to ability to make meaning of adversity sub items.

Table (8): The table explains that 53.6% have low resilience level. There was highly significant difference

Table (9): The table indicates that there was positive relation among burden family function and resilience. There was positive relation between function and resilience

Table (1) Soci-demographic characteristics of patients with schizophrenia

Items	No	%
Age		
22- 28	31	28.1
28 - 38	24	21.8
38- 48	29	26.4
+48	26	23.7
Mean years (+SD) 32.90±8.87		
Gender		
Male	45	40.9
Female	65	59.1
Education		
Illiterate	23	20.9
Read and write	46	41.8
Secondary / diploma	25	22.7
Bachelor	16	14.6
Job		
House wife	34	30.9
employee	30	27.3
Technical work	10	9.1
Don't work	36	32.7
Marital status		
Single	41	37.2
Married	39	35.5
Divorced	28	25.5
Widowed	2	1.8
Length of mental illness		
1 year – 5 years	58	52.7
5 years – 10 years	36	32.8
+10 years	16	14.5
Number of previous hospitalization		
One	28	25.5
Two	20	18.2
Three	62	56.3
Drug used		
Two	19	17.3
+ Two	91	82.7
Patient Residing		
Home with the family	92	83.6
Live alone in separate house	18	16.4

Table (2) Soci-demographic characteristics of family caregivers

Items	No	%
Age		
30-35	18	16.4
35-40	21	19.1
40-45	33	30.0
45-50	20	18.2
50-55	13	11.8
+55	5	4.5
Mean years (+SD) 35.35±8.270		
Gender		
Male	41	37.3
Female	69	62.7
Education		
Illiterate	11	10
Read and write	18	16.4
Secondary / diploma	61	55.4
Bachelor	20	18.2
Job		
Employed	34	30.9
Technical work	18	16.4
Clerical work	12	10.9
House wife	46	41.8
Marital status		
Single	28	25.5
Married	45	40.9
Divorced	23	20.9
Widowed	14	12.7
Relationship to Patient		
Father	7	6.4
Mother	27	24.5
Daughter	12	10.9
Son	11	10.0
Husband	8	7.3
Wife	26	23.6
Brother	7	6.4
Sister	12	10.9
Duration of care		
1-5 years	57	51.8
5 years 10 years	43	39.1
+ 10 years	10	9.1
co-caregivers		
Yes	13	11.8
No	97	88.2
Awareness of patient illness		
Yes	35	32.6
No	75	67.4
Enough	42	38.2
Not enough	68	61.8

Table (3) Adaptability and Cohesion among family caregivers living with schizophrenics' patient

	Almost Never		Once in Awhile		Sometimes		frequently		Almost Always	
Adaptability										
We are supportive of each other during hard time	-	-	-	-	45	40.9	52	47.3	13	11.8
In our relationship, it is easy for us to express our view					43	39.1	67	60.9		
It is easier to discuss problems with people outside the family than with my family.	-	-	51	46.4	30	27.3	29	26.3	-	-
We have participation about major family decisions.	10	9.9	37	33.4	25	22.5	20	18.1	18	16.1
We spend time together when we are home.					33	30	45	40.1	32	29.1
We are flexible in how we handle difference	91	82.7	19	17.3	-	-	-	-	-	-
We do things together.					75	68.2	35	31.8		
We discuss problems and feel fine about the solutions	12	10.9	22	20	39	35.6	20	18.1	17	15.4
In our family, we each go our own way.			10	9.9	70	63.6	30	26.5	-	-
We shift household responsibilities between us	41	37	25	22.5	23	20.8	21	19.7		
We know each other's close friends.	-	-	-	-	62	56.4	-	-	-	-
It is hard to know what the rules are in our relationship.	62	56.4	48	43.6	-	-	-	-	-	-

We consult each other on personal decisions.			35	31.8	34	30.9	29	26.4	12	10.9
We freely say what we want.	33	30	38	34.6	20	18.1	19	17.3	-	-
Cohesion										
We have difficulty thinking of things to do together.	19	17.3	-	-	63	57.3	-	-	28	25.4
We have a good balance of leadership in our family.	61	55	21	19.7	15	13.5	13	11.8		
We feel very close to each other.	33	30	24	21.8	31	28.2	22	20		
We operate on the principle of fairness in our family.	-	-	-	-	-	-	28	25.5	82	74.5
I feel closer to people outside the family than to my family members.	70	63.6	28	25.5	12	10.9				
We try new ways of dealing with problems.	91	82.7	19	17.3	-	-	-	-	-	-
go along with what my family decides to do.	62	56.4	29	26.3	19	17.3	-	-	-	-
In my family, we share responsibilities.	-	-	22	20	88	80	-	-	-	-
We like to spend our free time with each other.	21	19.7	19	17.3	15	13.5	23	20	32	29.5
It is difficult to get a rule changed in our family.	59	53	41	37	10	9.9	-	-	-	-
We avoid each other at home.	92	83.6	18	16.4	-	-	-	-	-	-
When problems arise, we cooperation.	15	13.5	36	32	19	17.3	30	27.3	10	9.9
We approve of each other's friends.	8	7.3	18	16.4	13	11.8	16	14.5	55	50
We are afraid to say what is on our minds.	13	11.8	35	31.8	62	56.4				
We tend to do more things separately.	10	9.9	15	13.5	36	32	19	17.3	30	27.3
We share interests and hobbies with each other.	33	30	22	20	12	10.9	12	10.9	31	28.2

Table (4) Level of family function (adaptability and Cohesion) among family caregivers living with schizophrenics' patient

	No	%	T	P
Low adaptability and cohesion	49	44.5	23.528	.000
Moderate adaptability and cohesion	36	32.7		
High adaptability and cohesion	25	22.7		

Table (5) Family caregivers burden living with schizophrenics' patient

	Never		Rarely		Sometimes		Quite Frequently		Nearly Always	
Time Dependency										
My patient needs my help to perform many daily tasks	-		10	9.9	-		80	72	20	18.1
My patients is dependent on me	-		65	59.2	15	13.5	30	27.3	-	
I have to watch my patient constantly										
I have to help patient with many basic function	12	10.9	36	32.7	11	10.0	51	46.4	-	
I don't have a minute's break from my care giving chores	-		20	18.1	26	23.6	64	58.3	-	
Developmental burden										
I feel that I am missing out on life	-	-	-	-	39	35.6	71	64.4	-	
I wish I could escape from this situation	-	-	50	44.6	41	37	-	-	19	17.3
My social life has suffered					20	18.1	90	81.9		
I feel emotionally drained due to caring for my patient	-		-		-		110	100	-	
I expected that things would be different at this point in my life	22	20	72	65.5	-	-	-	-	16	14.5
Physical burden										
I'm not getting enough sleep	14	12.7	22	20	12	10.9	23	20.8	39	35.6
My health has suffered	-		-		30	27.3	31	28.2	49	44.5
Care giving has made me physically sick	-		-				-		110	100
I am physically tired	-		-		-		99	90	11	10.0
Social burden										
I don't get along with other family members as well as I used to	-		-		85	76.6	10	9.9	15	13.5
My care giving efforts aren't appreciated by others in my family	-		22	20	69	61.6			19	18.4
I have had problems with my marriage	-	-	-		-		21	19.7	13	11.8
I don't do as good a job at work as I used to	-		9	8.2	49	44.5	52	47.3	-	
I feel resentful of other relatives who could but do not help	-		-		62	56.4	22	20	26	23.6
Emotional burden										
I feel embarrassed by my patient behavior	-		-		16	14.5	22	20	72	65.5
I feel ashamed of patient	-	-	9	8.2	30	27.3	49	44.5	22	20
I resent my patient	22	20	23	20.8	39	35.6	12	10.9	14	12.7
I feel uncomfortable when I have friends over	10	9.9	15	13.5	30	27.3	19	17.3	36	32
I feel angry about my interactions with my	-		-		15	13.5	40	36.5	55	50

patient									
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Table (6) Level of burden among family caregivers living with schizophrenics' patient

Level of burden	No	%	T	P
Mild to Moderate burden.	21	19.1	32.429	.000
Moderate to Severe burden.	61	55.4		
Severe burden.	28	25.5		

Table (7) Family caregivers Resilience

	Strongly agree		Agree		disagree		Strongly disagree.	
Family communication and problem-solving:								
Our family structure is flexible to deal with the unexpected	22	20	33	30	55	50		
We are able to work through pain and come to an understanding.	40	36.5	55	50	15	13.5		
We can deal with family differences in accepting a loss.	-		14	12.7	83	85.5	13	11.8
We are adjustable to demands placed on us as a family.	39	35.6	15	13.5	56	50.9	-	
We are open to new ways of doing things in our family.	22	20	33	30	55	50		
We are understood by other family members	15	13.5	40	36.5	55	50		
We ask neighbors for help and assistance.	12	10.9	44	40	35	31.8	19	17.3
We believe we can handle our problems	-		63	57.2	32	29.3	15	13.5
We can ask for clarification if we do not understand each other	-		34	30.3	55	50	21	19.7
We can be honest and direct with each other in our family	-		65	59.2	15	13.5	30	27.3
We can blow off steam at home without upsetting someone.	41	37	50	44.6	19	17.3		
We can negotiation when problems come up.	-		62	56.4	35	31.8	13	11.8
We can question the meaning behind messages in our family.	75	68.2	16	14.5	19	17.3		
We can talk about the way we communicate in our family	40	36.5	55	50	15	13.5		
We learn from each other's mistakes	47	42.7	30	27.3	18	16.5	15	13.5
We mean what we say to each other in our family	52	47.3	32	29.1	26	23.6		
We share responsibility in the family.	12	10.9	76	69.1	22	20		
We tell each other how much we care for one another			25	22.5	62	56.4	23	21.1
We try new ways of working with problems.	19	17.3	75	68.2	16	14.5		
We understand communication from other family members.	69	62.9	26	23.6	15	13.5		
We work to make sure family members are not emotionally or physically hurt	82	74.6	12	10.9	16	14.5		
We can work through difficulty as a family	-		36	32.7	22	20	52	47.3
We ask with each other about decisions	15	13.5	30	27.3	47	42.7	18	16.5
We argue problems and feel good about the solutions			32	29.1	47	42.7	31	28.2
We discuss things until we reach a decision.			72	65.5	33	30	5	5.5
We feel free to express our opinions.	20	18.1	90	81.9				
We feel good giving time and energy to our family	29	26.3	60	54	21	19.7	-	-
Maintaining a positive outlook								
We can solve main problems.	12	10.9	70	63.6	28	25.4	-	-
We can go on if another problem comes up.	12	10.9	16	14.5	82	74.6	-	-
We define problems positively to solve them	10	9.9	28	25.5	72	65.5	-	-
We feel we are strong in facing big problems	24	21.1	36	32.7	40	36.3	10	9.9
We have the strength to solve our problems.	28	25.4	37	33.7	45	40.9		
We trust things will work out even in difficult times.	51	46.4	36	32.7	11	10.0	12	10.9
Family spirituality								
We attend church/ /mosque services.	15	13.5	55	50	40	36.5	-	-
We have faith in God	110	100	-	-	-	-	-	-
We participate in church/ mosque activities	65	59.2	30	27.3	15	13.5	-	-
We seek advice from religious advisors	110	100	-	-	-	-	-	-

Family connectedness								
We feel taken for granted by family members	36	32.7	30	27.3	44	40		
We rarely listen to family members concerns or problems	33	30	55	50	22	20		
Our friends value us and who we are.	11	10	12	10.9	36	32.7	51	46.4
We think we should not get too involved with people in this community.	55	50	15	13.5	40	36.5		
We keep our feelings to ourselves	52	47.3	45	40.9	13	11.8		
We show love and affection for family members.	97	88.2	13	11.8				
Utilizing social and economical resources								
We keep our feelings to ourselves	56	50.9	45	40.9	9	8.2		
We can depend upon people in this community	35	31.8	13	11.8	62	56.4		
We feel people in this community are ready to help in an emergency	12	10.9	16	14.5	31	28.2	51	46.4

We feel secure living in this community	63	57.2	13	11.8	24	21.1	10	9.9
We know there is community help if there is trouble	100	90.1	10	9.9				
We know we are important to our Friends	72	65.5	31	28.2	7	6.3		
We receive gifts and favors from neighbors.	73	66.4	30	27.3	7	6.3		
We think this is a good community to raise children	13	11.8	45	40.9	52	47.3		
Ability to make meaning of adversity								
The things we do for each other make us feel part of the family.	32	29.9	50	44.6	19	17.3	9	8.2
We accept stressful events as part of life.	13	11.8	62	56.4	35	31.8		
We accept that problems occur unexpectedly.	31	28.2	51	46.4	12	10.9	16	14.5

Table (8) Level of family resilience

Level of resilience	No	%	T	P
Low family resilience	59	53.6	22.882	.000
Moderate family resilience	34	30.9		
High family resilience	17	15.5		

Table (9) Relationship between burden of care with family function and resilience

Variable	R	T	Sig
Relationship between family burden and function	.036 ^a	12.814	.710 S
Relationship between family burden and resilience	.054 ^a	11.891	.577 S
Relationship between family function and resilience	.122 ^a	7.870	.204 S

III. Discussion

Caring for a family member with a mental illness, and particularly schizophrenia may place a burden on the family and many families are imposed to regulate their lifestyle and coping skills during a potentially stressful period. This stressful experience can be recognized as a crisis .To beat a crisis, it is believed that the family should regulate and adapt, therefore be resilient as a family unit.

Soci-demographic characteristics of patients with schizophrenia

The result of present study explained that the highest percent of patients were females in age group 18-28, they were single, don't work. This may be due to early onset of disease hindered them to assume life responsibility. This result in the same line with **Harmanci et al., (2016)** they analyze the relationship between the emotional, social, physical, and economic burden and mental health of caregivers of patients diagnosed with schizophrenia and found that more half of study sample female were in the age range between 20 and 30 years, were single. This results is contradict with **Abu Shair and Eljedi(2015)** they evaluate the level of physical, emotional, economic and social burden experienced by the caregivers of schizophrenic patients in Gaza strip .he found that highest percent of patients were males , their age 31-40 years old. Concerning to the length of illness and numbers of hospitalization the highest proration of patients had illness duration 1-5 year and had three time hospitalization. This result is contradicting with

Seselo,Kajula, and Malima (2016) find out the psychosocial problems of mental illness on the family . They found that the patients' illness duration was 7 month: 26 year old

Soci-demographic characteristics of family caregivers

The result showed that the most of care giver were married female with secondary level of education, stay in the same home with patient and were only the main caregivers in the family. This result in agreement with **Inogbo, et al (2017)** they determine the pattern of psychiatric disorders amongst caregivers who are first-degree relatives of patients with schizophrenia. They found two third caregivers were mostly married females with secondary level of education and were solely

responsible for payment of their treatment. Regarding to relationship with patient the most of family care givers were (mothers, wife, daughter and sister) this reflects that emotional, social ties of women towards their patients, as well as their sense of family responsibility as the basis for their nurturing approach to care giving. This result is consistent with **Imas, & Wandee,(2012) and and Caqueo, et al., (2014)** they found that about 80% of the caregivers are women who could be the mother, wife, or daughter of the patients .

About duration of care the results explain more half of family caregivers spend 1- 5 years in caring their patient's .this result in the same line with **Crowe, and Lyness (2014)** they investigate association among coping, burden and functioning in Families with Serious Mental illness and . They found that years spent care giving were 0- 5 years

Burden among family caregivers

The result of present study clarified that the most of family caregivers living with schizophrenic patients have a different domains of burden. This may be related to many factors such as the family caregiver's members assume all responsibilities of care for their patients. The majority of patients not compliance with medical treatment, lack of rehabilitation services for mental ill patients, uncertainty about patients future, and financial hardship. Concerning to "time dependency" domain. The most of caregivers reported that their patients need help to perform daily task and don't have a minute's break from my care giving chores, this may be due to the family caregivers are always observing the patient's behavior to prevent troubles with other, the patients complain from negatives symptoms, gave up his responsibility in home and work. This result is consistent with **Yazici,etal., (2016)** they assess determination of the factors related to caregiver burden in schizophrenia. They found the family care givers suffers from time constrain due to caregivers responsibility regardless the severity of symptoms. Regarding "developmental burden" the all family caregivers clarified that they fell emotionally drained due to caring of their patient. This may be due to family member unable to detect accurately patients needs, unpredictability of sing and symptoms of disease so that

they have to meet sudden circumstances, their patient unable to achieve reasonable social role, lack of community support additionally they are overwhelmed by meeting other life demand for a whole family members. This explanation is agreement with **Sachin,Suresh,and**

Ravindra (2014) they stated that the emotional impact of any psychiatric disorder on family caregivers can vary from frustration, anxiety, fear, depression and guilt to grief. Because care giving is such an emotionally draining so that family caregivers focused on negative aspects of care giving.

This explanation was accordance to **Raj, Shiri,and Jangam (2017)** explained that due to the changing conditions and needs of the patients, caring for a family member with mental health problem is not a static process. The impact of care giving can be more demanding if the mental disorder is associated with behavioral or decreased functionality. The caregivers' burden increases with more patient contact and when patients live with their families.

About physical burden the all caregivers clarified that care giving had made them physical sick .this may be due they are used to do everything for their patients such as cooking, shopping, medication management, observing patient behavior to prevent relapse. Additionally they were struggling to maintain stable living condition to family as whole. This result is similar to **Yu., et.,al(2017)** assess the level of family burden of schizophrenia patients and identify its predicting factors in a rural community sample of China. They found near half of family caregivers suffer from disturbed physical health. Also the result is correspond with

Elmore, (2014) explained that family caregivers, are at risk for negative physical health effects, which may emerge over time as care demands increase. Caring for a patient may often include assistance with activities of daily living (ADLs) such as bathing, dressing, eating, and transferring. These care giving tasks can put a great deal of strain on a caregiver's physical health.

Concerning to social burden highest proportion of family caregivers clarified that they don't get along with other family members as well as they used to. This may be due to different reasons such as they are sole caregivers, were worried from consequence of patients' behavior; feeling shame and embarrassing from patient behavior therefore they withdrawal them self from social activity. Additionally the community members blaming them for their patient's behaviors. This result is in same line with **Ae-Ngibise.,etal (2015) and Souza., etal .(2017)** they assess the burden of care of people living with mental ill in rural Ghana and Factors associated with the burden of family caregivers of patients with mental disorders. They found the most of study sample in both group suffers from disruptions in social life due to social stigma and lack of social support.

Concerning to emotional burden the result clarified that the greatest percent of family caregivers' feel embarrassed by their patient behavior and angry about their interaction with their patients this may be due to sudden exacerbation of positive symptoms of illness, lack of knowledge about managing disturbed behavior, lack of support from other family members and medical team and stigma of mental illness. This result was consistent with **Negm.,et al (2016)** compare family burden, quality of life , and disability in patients with at least moderate OCD and patients with chronic schizophrenia of comparable severity. They found that the majority of family members have been suffered from emotional burden

Also the result is similar to with **Abu Shair and Eljedi(2015)** they evaluate the level of physical, emotional, economic and social burden experienced by the caregivers of schizophrenic patients in Gaza strip. Found that psychological burden among family caregivers attain highest mean of burden

Level of burden among family caregivers

The result of present study denoted that more half of family caregivers

Prone to moderate to severe level of burden this may be related to different factors such as they were responsible for daily living activity for their patients severity of psychotic symptoms , lack of cooperation from other family members, frequent patients admission to hospital, disruption in the family routine devalue

,from other ,Financial hardship .the highest percent of family members mentioned they feeling of embarrassment in social situation and feeling of uncertainty from future .this result is similar to **Yu., et.,al(2017)** assess the level of family burden of schizophrenia patients and identify its predicting factors in a rural community sample of China. They found that family caregivers had moderate to severe level of burden. This result was in the same line with **Chien ,Ibrahim and Wahab.,(2017)**determine level of caretaking burden and explore the correlation between caretaking burden and quality of life of the caregivers . They found that forty percent of caregivers reported had a moderate to severe level of burden

This result was contradict with **Ajao .,etal., (2016)** they assess

Burden experienced by family caregivers of patients with mental disorders at selected hospitals in ekiti state, nigeria. They found that two third of family caregivers experience mild to moderate level of burden.

Adaptability and Cohesion among family caregivers living with schizophrenics' patient

Regarding to adaptability sub items the result clarified the most of family caregivers aren't flexible in handle difference among them. They may be due to different factors: the family caregivers ignore the needs of their patients and other family members, perceived difference as main signs of behavior disorders, had a lack of communication and problems solving skills. Additionally they see individual difference as form of rebellious against family norms therefore all of time they are criticizes patient behavior. This result was contradict with

Jelkic et al (2016) they evaluate the characteristics of functioning of family with mentally ill children and adolescents. And they found the family adaptability (flexibility in handling stressors and difference) was similar to families with healthy children.

The present result clarified that more half of family caregivers mentioned that it is hard to know what the rules in their family relationship .this may be due to they are preoccupied by achieving daily living requirement, lack of emotional boundaries and autonomy within family as well as every person in the family responsible for his / her behavior, and lack of negotiation style within families. This result was disagreement with **Batra., Ghildiyal., and Saoji(2016)** assess the level of expressed emotions prevailing among the caregivers of inpatients with mental illness in a general hospital., they found the most of family members caring mental ill patients are emotional involvement so that it is easy to know rules among them .

Concerning to cohesion sub-items the most of family caregivers haven't avoid each other at home and try new way of dealing with problems. This may be due to different reasons; emotional ties among them , they overwhelmed by burden of care, the family members were blamed for their patients illness and non adherence with treatment, lack of community support for psychiatric patients and their families , and they have been realized nature of illness . This result is similar to **Crowe, and Lyness (2014)** they investigate association among coping, burden and functioning in Families with serious mental illness and found that the family's members were more cohesiveness science discovered their patient's illness.

The result more half of family caregivers explain they haven't a good balance of leadership in their family and don't go along with their family decides to do. This may be related to (Laissez faire)leadership style within the family, lack of motivation, family communication not encourage open discussion , mutual change of opinion .furthermore in stressful situation all family members have Scapegoat person.

This result was similar with **Carvalho.,et al., (2014)** they assess healthy functioning in families with a schizophrenic Parent. They found that high percent of patients see their family not connected to each other

Level of family function (adaptability and cohesion) among family caregivers living with Schizophrenics' patient

The result of present study show that highest percent of family caregivers had low level of adaptability and cohesion this could be due to the family caregivers had devoted of their time to care of schizophrenia patients which result an increase of burden of care . the most of caregivers suffers from disturbance in domestic routine and leisure time ,and decline in financial status moreover they were worry about the patient future , facing many challenges such as coping with mental illness stigma , promote patients compliance with treatment ,search for community support furthermore they were struggle to adapt life circumstance to whole family members .

This result in the same line with **Bhandari., etal ., (2015)** they assess the levels of care giving burden among family members of people with mental illness. They found that more half of families have a poor level of family function and high burden.

This result is disagreement with **Okefor.,and Chukwujekwu (2017)** they assess the family functionality status of patients with mental illness. Found that the most of family members had moderately level of family function.

Family Resilience living with schizophrenics' patients

The result of present study indicated that the most of family caregivers have been agree that devote efforts to maintain family resilience while caring their patient. Concerning to family communication and problems

solving. The results illustrate the highest percent of family caregivers agree that they feel free to express their opinions, shared responsibility in the family and try a new ways of working with problems. This may be due to different reasons such as, acceptance and understanding patient illness, actively engage in the caring process, looking for assistance, and they have a strong desire to lessen impact of the patient illness on the family. This result and explanation is **consistent Amagai, Takahashi and Amagai, (2016)** they examine the resilience of family members who care for patients with schizophrenia in Japan, they found resilience of family caregivers of patients with schizophrenia brings a positive change in recovery and adaptation of the family through understanding the features of the disease, sense of mission as a family to protect a family member with illness and learned coping skills .

The present study clarified that highest percent of family care givers strongly agree that they work to make sure family members are not emotionally or physical hurt. This may be due to they are commitment caring patients ,emotional bond among family members as well as they have a self efficacy to manage patient disturbed behavior, and they are confidence in preventing harm effect upon the family. This result is similar to **Francesca., et al (2016)** examining the origins and definition concept of resilience among family care giving of adult with chronic obstructive pulmonary disease, they found that imbalance between family care giving burden and coping capacity ,the family members show emotional controlling attitude from preventing physical and emotional harm to their family members.

As regards maintaining positive outlook the majority of family caregivers disagree that they can go on if another problem comes up. This may be due to the family caregivers had devoted most of their time to take care of their patient, increased burden among them that negatively affect quality of life, impaired social and family life, inhibit their ability to resist another problems .This result not accordance with. **Zauszniewski, Bekhet, and Suresky(2012)** they assess resilience among family caregivers with mental illness , found that resilience helping the family caregivers to maintain positive outlook for their family through hardiness to cope with a new crisis event

Concerning to family spiritually the finding of this study explained that all family caregivers strongly agree that they have faith in God and they seek advices from religious advisors. This reflect our culture , and may be related to they see illness and recovery from Allah as well as religious activity such as prayer enhance acceptance of illness ,optimism, empathy , forgiveness , and decrease anxiety and depression. This result is consistent with **Las Hayas, Arroyabe,and Calvete (2015)** develop the Questionnaire of Resilience in Caregivers of Acquired Brain Injury. They found that all caregivers confirmed that spiritual is positive aspect of care giving. All of them have trust in God and ask help from God.

About family connectedness the finding shows that most of family caregivers explained that within family, they show love and affection for family members. This may be due to they had a strong desire to decrease burden, relive stress of caring, control anger, and foster hope among family members additionally it considers form of active family coping process to restore adaptation with their patient illness . This result is similar to **Power.,et al (2016)** they explores the concept of family resilience where a parent has a mental illness. They found that Families developed resilience through processes such as shared laugh or regular family rituals and routines open communication about mental illness enabled families to better cope when parents were unwell and to build a greater sense of family connectedness.

In relation to utilizing social and economical resources most of family caregivers, reported that they know there is community help if there is trouble this may be related to they already search for community agency for helping and their needs a nongovernmental organization for rehabilitation and supporting. These results in the same line with **Abou-Dagga (2014)** investigated the relationship between psychological stress and resilience among parents of children diagnosed with ASD in Gaza Strip. He found that Social support can foster new skills, emotional growth and hope for the future and suggest that social support interventions should focus their efforts on promoting feelings of emotional connectedness to others.

Finally as regard to make of diversity. The present study denoted that half of family care givers agree that they accept stressful event as part of the life. This may be due to families become more organized and structured as they struggle to manage the stress and demands of family .furthermore caring schizophrenic patient helping them to gaining sense of coherence, have control over what happen in life, and gain self confidence in dealing with stressors.

This result was similar to **Dutta,(20 11)** assess burden felt and the characteristics of resilience among caregivers of person with chronic mental illness . Found that two third (72.4%) of responds accept stressful event as part of life.

Level of family resilience

The present study explained that the half of the family care givers had low level of family resilience this may be related to different factors such as they were experience strain and burden on their physical and emotional, lack of communication and problems solving skills, social isolation and stigma of illness, moreover

they had a financial pressure. This result was disagreement with **Faqurudheen., Mathew, and Kumar (2014)** they identified socio-demographic characteristics and understand the level of family resilience of clients and their caregivers seeking treatment for mental illness within a community mental healthcare set-up. Found that family care givers display high levels Of family resilience

Relationship between burden of care with family function and resilience

The finding of the present study showed that there was a significant relation between family burden and function .this may be due to the family care givers modified their roles, dynamics, communication style and problem solving to combat burden of caring schizophrenic patients'. Additionally most of schizophrenic patients had impaired in social function which lead to the family caregivers devote more efforts to find appropriate social services for enhancing patient level of dependence and unpredictability of patient psychotic symptoms threaten family stability and adaptability. This finding is similar to **Hsiao, and Tsai (2014)** assess the degree of caregiver burden and family functioning among Taiwanese primary family caregivers of people with schizophrenia .they found that there was a significant positive correlation between family burden and function .

As regards to relationship between family burden and resilience there was a significant relation. This may be related to family caregiver's experience physical, emotional, financial problems, stigma of mental illness, fear, anxiety about future, change in life style, communication and embarrassment by patient social behavior which hinder family abilities to sustain flexibility, humor and hope additionally care giving burden lead to place their needs after the needs of the patients that influence social network, sense of coherence and connectedness with family members. This result was disagreement with **Vagharseyyedin and Molazem (2014)** explore the relationship between burden, resilience and happiness among family caregivers of patients with spinal cord injury found significant negative correlation between burden and resilience.

Relationship between family function and resilience this may be due to different reasons the family caregivers don't accept patient illness,

unprepared to meet demands of care giving, perceive care giving as burdensome, and lack of counseling and education services for supporting families, care giving responsibilities lead to change of roles, communication, problem solving, and relationship in the family. In addition the family caregivers don't acquire skills to manage patient disturbed behavior, have been used emotional coping strategies and depend on support from spiritual activity. This result in agreement with **Openshaw,(2011)** examine the family resilience of individuals with a disability, found that Family functioning and family resilience significantly correlated with all of the life domains.

This result is similar to **Rea-Amaya, Acle-Tomasini and Ordaz-Villegas (2017)** find out into the relationship between resilience potential factors of parents of children with ASD, and disability acceptance and family functioning. Found that Parents' resilience potential factors that have a Positive, significant relation to family functioning

IV. Conclusion

The present studies conclude that:

- Family caregivers who experience moderate to severe burden have low family function and low level of resilience

V. Recommendation

- Developing of stress coping skills training for reducing burden in families of patients with schizophrenia.
- Implementing of counseling intervention for promoting resilience among family caregivers of schizophrenia
- Future research to describe association between care giving tasks and caregiver burden

Reference

- [1]. **Abou-Dagga., K.S. (2014)** Psychological stress and resilience among parents of autistic children in Gaza Strip. Published master thesis. Community Mental Health Nursing. The Islamic University of Gaza.34
- [2]. **Abu Shair ,A.N and Eljedi,Y.A (2015)** Burden of Family Caregivers of Schizophrenic Patients in Gaza Strip, Palestine . Journal of Natural and Engineering Studies. Vol 23, No 2, pp 32
- [3]. **Adeosun, Ibukun. (2013)** Correlates of Caregiver Burden among Family Members of Patients with Schizophrenia in Lagos, Nigeria. Hindawi Publishing Corporation Schizophrenia Research and Treatment. <http://dx.doi.org/10.1155/2013/353809>
- [4]. **Ae-Ngibise,A.K ., Doku.,K.C., Asante.,P.K and Agyei.,Q.S., (2015)** . The experience of caregivers of people living with serious mental disorders: a study from rural Ghana. Global Health Action .<http://www.tandfonline.com/loi/zgha20>
- [5]. **Ajao.,B.L., Fabiyi., B., Olabisi., O. and Akinpelu ., A.(2016)** Burden Experienced By Family Caregivers Of Patients With Mental Disorders At Selected Hospitals In Ekiti State, Nigeria. International Journal of Health and Psychology Research. Vol.4, No.2, pp. 39

- [6]. **Alejandra, C. U., José, G. M., Marta, F. G., Claudia, P. S., David, R. A. & Alejandro, C. P. (2011).** Attitude and burden in relatives of patients with schizophrenia in a middle income country. *BMC Fam Pract*, 12: 101. Doi: 10.1186/1471-2296-12-101
- [7]. **Amagai, M., Takahashi, M. and Amagai, F. (2016)** Qualitative Study of Resilience of Family Caregivers for Patients with Schizophrenia in Japan. *Mental Health in Family Medicine*. 12: 309
- [8]. **Batra, S.B., Ghildiyal, R. and Saoji, M.A. (2016)** Expressed Emotions among Caregivers of Patients with Mental Illness: A Descriptive Study *Journal of Dental and Medical Sciences (IOSR-JDMS)*.(15) ,7.60
- [9]. **Bhandari, AR, Marahatta, K., Rana, M., Ojha, SP, Regmi, MP. (2015)** Care giving Burden Among Family Members Of People With Mental Illness. *J Psychiatrists' Association of Nepal Vol .4, No.1.*
- [10]. **BISHOP, M. (2014)** Resilience In Families In Which A Member Has Been Diagnosed With Schizophrenia. Unpublished master thesis. Department of Psychology. Faculty of Arts and Social Sciences. University of Stellenbosch.45
- [11]. **Caqueo-Urizar A, MirandaCastillo C, Lemos Giráldez S, Lee aturana SL, Ramírez Pérez M, Mascayano Tapia F. (2014)** An updated review on burden on caregivers of schizophrenia patients. *Psicothema* ; 26: 23 243 [PMID: 24755026 DOI: 10.7334/psicothema2013.86
- [12]. **Carvalho, J.S., Freitas, P.P., Leuschner, A., and Olson, H.D. (2014)** Crowe, A., and Lyness, P.K (2014) Family Functioning, Coping, and Distress in Families With Serious Mental Illness. *Journal of Family Psychotherapy*, 25:1–11. 22(2).189
- [13]. **Chien, H.A., Ibrahim, N., and Wahab, S. (2017)** correlation of quality of life and burden among caregivers of schizophrenic patient : A preliminary study .*Medwell journal* .12(3) .421
- [14]. **Dutta, O. (2011)** Extent Of Burden and Resilience among Families of Person with Chronic Mental Illness. Master thesis in psychosocial rehabilitation and counseling. Rajivgandhi University of health sciences. Karnataka .63
- [15]. **Elmore, L.D (2014)** The Impact of Care giving on Physical and Mental Health: Implications for Research, Practice, Education, and Policy. Springer Science +Business Media. New York.16
- [16]. **Faqurudheen, H., Mathew, S. and Kumar, K (2014)** Exploring family resilience in a community mental health setup in South India. *Procedia Economics and Finance* 18. 391 – 399
- [17]. **Francesca, R., Bagnasco, A., Aleo, G., Kendal, S. and Sasso, L. (2016)** Resilience as a concept for understanding family care giving of adults with Chronic Obstructive Pulmonary Disease (COPD): an integrative review. Department of Health Sciences. University of Genoa, Genoa, Italy
- [18]. **Harmanci, B., Yukleri ve, V. Durumlari, S.R and İncelemesi, L.I (2016)** Investigating Relationship Between Burden of Caregivers of Patients With Schizophrenia and Mental Health Conditions. *Journal of Psychiatric Nursing* ;7(2):82-86
- [19]. **Hsiao, Y.C. and Tsai, F.Y (2014)** Factors of caregiver burden and family functioning among Taiwanese family caregivers living with schizophrenia. *Journal of clinical nursing* . 24, 1546–1556, doi: 10.1111/jocn.12745
- [20]. **Imas, R. S. & Wandee, S. (2012).** Review: Burden on family caregivers caring for patients with schizophrenia and its related factors. *Nurse Media Journal of Nursing*, 1(1):29-41.
- [21]. **Inogbo, CF, Olotu SO, James BO, Nna EO (2017)** Psychiatric Disorders amongst Caregivers who are First Degree Relatives of Patients with Schizophrenia. *Journal of Psychiatry and Human Behavioral Science*. 1.1.3
- [22]. **Jelkic, M., Gajic, M., Stojanovic, Z., Đokic, M., Aleksandar, E., KolundZija, K. (2016)** The Characteristics of Family Functioning With Mentally Ill Children and Adolescents. Department of Psychiatry, Military Medical Academy, Belgrade, Serbia; 32
- [23]. **Las Hayas, C., Arroyabe, L. and Calvete, E. (2015)** Resilience in Family Caregivers of Persons With Acquired Brain Injury. *Rehabilitation Psychology*. American Psychological Association.5
- [24]. **Negm, G.M., Mahdy, S.R., Khashaba, M.A., and Abd El-Latif (2017)** Comparison of family burden, quality of life, and disability in obsessive compulsive disorder and schizophrenia in Zagazig University Hospitals. 2014 *Egyptian Journal of Psychiatry*. 45.107.9.61
- [25]. **Novak M, and Guest C. (1989)** Application of a multidimensional caregiver burden inventory. *Gerontologist*; 29: 798-803
- [26]. **Okefor, CU, Chukwujekwu, DC. (2017)** Assessment of family functionality status among patients with mental illness at a tertiary health facility in rivers state, Nigeria .*Niger J Clinical Res* ;6:1-5
- [27]. **Olson, D. H., Bell, R., & Portner, J. (1982).** FACES-II family adaptability and cohesion evaluation scales. In D. Olson, H. McCubbin, H. Barnes, A. Larsen, M. Muxen, & M. Wilson (Eds.), *Family inventories* (pp. 5-24). St. Paul : University of Minnesota Press..
- [28]. **Openshaw, P.K (2011)** The Relationship Between Family Functioning, Family Resilience and Quality of Life among Vocational Rehabilitation Clients. Doctorate thesis. Utah State University. 121
- [29]. **Power, J. Goodyear, M. Maybery, D. Reupert, A. Hanlon, O. Cuff, R. and Perlesz, A. (2016)** Family resilience in families where a parent has a mental illness. *Journal of Social Work* 2016, Vol. 16(1) 67
- [30]. **Puasiri, S., Sitthimongkol, Y., Tilokskulchai, F., Sangon, S. & Nityasuddhi, D. (2011)** Adaptation of Thai families with mentally ill young people. *Pacific Rim International Journal of Nursing Research* 15, 137–151.
- [31]. **Pun K., He, G., and Wang, X. (2014)** Extent of Burden and Coping among Family Caregivers Living with Schizophrenic Patients in Nepal. *International Journal of Sciences: Basic and Applied Research (IJSBAR)*, 14(1), 428
- [32]. **Raj, V.E., Shiri, S., and Jangam, V.K. (2017)** Subjective Burden, Psychological Distress, and Perceived Social Support Among Caregivers of Persons with Schizophrenia. *Indian Journal of Social Psychiatry*; 32:42-9.
- [33]. **Rea-Amaya, C.A., Acle-Tomasini, G., and Ordaz-Villegas, G. (2017)** Resilience Potential of Autistic Children's Parents and Its Relationship to Family Functioning and Acceptance of Disability. *British Journal of Education, Society & Behavioral Science* 20(1): 1-16.01
- [34]. **Sachin, S., Suresh, V. and Ravindra, H.N. (2014)** A descriptive study to assess the burden among family care givers of mentally ill clients. *IOSR Journal of Nursing and Health Science*. 3, (3) .62
- [35]. **Schizophrenia Information: Facts, Schizophrenia Community (2014).** Retrieved: December 5, 2014. From web address <http://schizophrenia.com/szfacts>
- [36]. **Seselo, K., Kajula, L., and Malima, Y.L. (2016)** the psychosocial problems of families caring for relatives with mental illnesses and their coping strategies: a qualitative urban based study in Dar es Salaam, Tanzania .*BMC psychiatry*. 6:146.4
- [37]. **Shrama, k.p. (2014)** burden in care patient with schizophrenia : to which extent caregiver suffers . *Journal of pharmaceutical and scientific innovation* .3(6).521.
- [38]. **Sixbey, M. (2005).** Development of the family resilience assessment scale to identify family resilience constructs. Unpublished doctoral thesis .University of Florida,
- [39]. **Souza, R.L., Guimaraes, A.R., Araújo, D.D., de Assis, M.R., Oliveira, C.C., Nogueira, J.D., and Barbosa, A.M. (2017)** Factors associated with the burden of family caregivers of patients with mental disorders: a cross-sectional study. *BMC Psychiatry*. 17:353.7

- [40]. **Vagharseyyedin., A.S. and Molazem ., Z.(2014)** Burden, resilience, and happiness in family caregivers of spinal cord injured patients . Middle East Journal of Psychiatry and Alzheimer's. Volume 4 Issue 1.31
- [41]. **Yazıcı,s. Sakarya, U., Tıp., Fakultesi, P.,Anabilim, D.,and Sakarya, T.(2016)** Burden on Caregivers of Patients with Schizophrenia and Related Factors. Arch Neuropsychiatry., 53: 96-101.
- [42]. **Yu.,yu., Liu.,wei., Tang., w. Zhao.,M. Liu.,G.and .,Xiao.,Y.S (2017)** Reported family burden of schizophrenia patients in rural China. PLOS ONE <https://doi.org/10.1371/journal.pone.0179425>.
- [43]. **Zauszniewski,J. Bekhet,A., and Suresky,J.(2012)** Resilience in Family Members of Persons with Serious Mental Illness. Nursing faculty research and publication .Marquette university.45

Sahar Mahmoud "Association between Burden of Care, and Resilience among Family Caregivers Living with Schizophrenic Patients". IOSR Journal of Nursing and Health Science (IOSR-JNHS) , vol. 7, no.2 , 2018, pp. 42-55.