ISSN 2394-7330

International Journal of Novel Research in Healthcare and Nursing
Vol. 6, Issue 2, pp: (176-187), Month: May - August 2019, Available at: www.noveltyjournals.com

Effect of Expressed Emotion Management program on Caregiver's Burdens of Patients with Dementia

[1]Hanaa Sayed Ewais, [2]Omayma Abo Bakr Osman, [3]Afaf Mohamed Fahmy, [4]Omaima Ezzat mahmoued

[1]Clinical instructor, Faculty of Nursing, Bani Suief University
[2]Professor of Psychiatric/Mental Health Nursing, Ain Shams University
[3]Assistant professor of Psychiatric /Mental Health Nursing, Ain Shams University
[4]Lecturer of Psychiatric/ Mental Health Nursing, Beni-Suef University

---

Abstract: **Caregivers of patient with dementia face many problems as, stress, anxiety and high level of burdens related to caregiving .The permanent burdens of caregiving is likely to generate negative expressed emotion toward the patient. Aim: to evaluate the effect of expressed emotion management program on caregivers burdens of patients with dementia. Study design: a quasi-experimental design was utilized to conduct this study. Setting: this study was conducted in the neuropsychiatric clinic at Beni-suef psychiatric hospital. Subject: convenient sample of 50 family caregiver's was chosen for conducting this study. Data collection tools: 1) Socio-demographic questionnaire for patients with dementia and their family caregiver's. 2) Expressed emotions scale. 3) Zarit burden scale .Results: the present study revealed that there was a highly statistically significant improvement regarding family caregivers expressed emotion and burdens scores post implementation of expressed emotion management program. In addition, there were highly statistically significant positive correlations between caregiver's total expressed emotion and total burdens score under the study pre, post and follow up implementation of expressed emotion management program. Conclusion: the implementation of expressed emotion management program has a statistically significant positive effect on caregiver's burdens of patient with dementia. Recommendations: Designing a systematically continuous family intervention programs in psychiatric hospitals to provide proper information and psychological support that help the family caregivers handle difficult thoughts and emotions, reduce negative expressed emotion and reduce sense of burdens.**

Keywords: **Expressed emotion, Caregiver's burdens, Dementia.**

---

1. INTRODUCTION

Dementia refers to disease process marked by progressive cognitive impairment in clear consciousness. Dementia involves multiple cognitive domains and cognitive deficit cause significant impairment in social and occupational functioning **(Lepore, Ferrell, Joshua & Wiener, 2017).**

According to World Health Organization (WHO), The number of people living with dementia worldwide in 2015 was estimated at 47.47 million, this number is expected to rise to 75.6 million by 2030 and almost triple by 2050, reaching 135 million **(WHO, 2015).**

Majority of people with dementia live in their own home and most of their care is provided by family in developing countries as Egypt the family spend more time with the person to assisting with activities of daily living, provide personal care and higher levels of supervision. Also family members play an important role in bringing the patient in contact with the mental health care professional and providing financial as well as psychosocial support to the patient during the process of treatment **(Erin, Shuman & Ignaczak, 2016).**

Furthermore roles of families in the care of people with dementia and the ensuring caregiver burden have been increasingly acknowledged in the research literature in the last three decades. Cultural factors likely play an important role in determining both the perceived burden and family caregiver's attitudes towards patients **(Cheng, 2017).**

Moreover, expressed emotion (EE) is considered to be a measure of family environment, which takes into account the quality of interaction patterns and nature of inter-personal relationships among the family members and patients with dementia. EE is a significant characteristic of the family milieu that reflects key aspects in inter-personal relationships **(Safavi, Berry, & Wearden, 2017).**

Expressed emotion have effects on caregiving burdens among relatives of patients with dementia. Negative expressed emotion are associated with high levels of burden **(Wang, Chen & Yang, 2017).**

Psychiatric nurses might teach about the process of negative expressed emotion that often associates with dementia. Therefore, the psychiatric nurses also play important role in providing the family caregivers with basic information that help to deal better with the patient and reduce the negative emotion **(Hunter & Miller,2016).**

Significance of the study:

Dementia has become a major public health problem among the elderly in developing world. In Egypt nearly four million of the Egyptian population were above the age of 65, the prevalence rate was reported as 20.46% for those aging**(Elshahidi,Elhadidi, Sharaqi, Mostafa & Eizhery, 2017).**

Caregivers of people with dementia often called the invisible second patients. Caregivers face many psychological problem as burden, stress, depression and anxiety. Numerous studies report that caring for a person with dementia is more stressful than caring for a person with a physical disability. The permanent burden of care giving to a patient with dementia is likely to generate negative expressed emotions toward patient **(Borsje, Hems, Lucassen, Bor&Koopmans, 2016).**

Aim of the study:

To evaluate the effect of expressed emotion management program on caregivers burdens of patients with dementia.

Research hypothesis

Management program will having positive effect on caregivers burdens of patients with dementia.

2. SUBJECTS AND METHODS

I. Technical design:

A-Research design: A quasi experimental design was utilized to meet the aim of the study (one group pre/post test and follow up).

B- Research Setting: The present study was conducted at the neuropsychiatric clinic at Beni-suef psychiatric hospital.

c- Subjects: Convenient sample was used in the current study. The sample was chosen as the number of available family caregiver's of patient with dementia, and the caregiver's of the present study included (50) family caregiver's who meet the following criteria:-

- Family caregiver's from both sex
- Family caregiver's and patient with dementia living in the same dwelling.
- Family caregiver's identified him/ herself as the main provider of care for the patient with dementia.
- Family caregiver's agree to participate in the study.

D-Tools for data collection:

- **<u>Tool (1):</u> Socio-demographic Questionnaire for patients with dementia and their family caregiver's:**

It was developed by the researcher, which includes items related to patient with dementia such as: age, marital status, education, occupation, onset and stage of disease. Also, socio-demographic questionnaire includes items related to family caregiver's of patient with dementia as: age, marital status, income, education, occupation and relation to the patient.

Tool (2): Expressed emotions scale (EES)

This tool was designed by ***Berksun, (1992)*** and adapted by the researcher to be used for assessing expressed emotion characteristics of family caregiver's.

Tool (3): Zarit Burden Interview (ZBI)

This tool was designed by ***Zarit, (1980)*** and adapted by the researcher to be used for assessing the level of burdens experienced by the family caregivers'.

II. Operational design:

The operational design includes: preparatory phase, validity, reliability, pilot study and fieldwork.

- **Preparatory phase:** It includes reviewing of literature and different studies related expressed emotion and burdens among family caregiver's of patient with dementia by using books, articles, magazines and internet.

- **Validity and reliability:**

To achieve the criteria of trustworthiness of the data collection tools in this study, tools were tested and evaluated for their face and content validity. Face and content validity was tested by five experts in mental health nursing and medicine specialties . In addition, the reliability of tools was assessed through measuring their internal consistency by Cronbach Alpha Coefficient test.

- **Pilot study:**

A pilot study was under taken after the adaptation of the tools and before starting the data collection. It was conducted on (5) family caregiver's of patient with dementia.

Field work:

The study was started and finished through the following phases:

Phase I: Designing phase

This phase aims at planning for expressed emotion management program for family caregiver's of patient with dementia through setting objectives, preparing the educational skills and designing the methodology and media.

Phase II: Implementation phase

Data collection of these study was being carried out in neuropsychiatric clinic at Beni-suef psychiatric hospital. Family caregiver's who fulfilled the inclusion criteria were selected. Data collection (pre-test) was started and completed within 3 months , starting from August 2017 to October 2017.

- Each session of the expressed emotion program had taken about 30-45 minutes/day for 4 days per week. These sessions were conducted for small groups; each group did not exceed five caregiver's .

-The teaching sessions were conducted in a classroom in the neuropsychiatric clinic. The classroom was air conditioned, quiet, well ventilated, well furnished, and had adequate lighting and adequate spacing for implementing expressed emotion program activities.

- Implementation of expressed emotion management program lasted over a period of (5) months, starting from November 2017 to March 2018 for all family caregiver's under the study.

-At the beginning of the first session, an orientation of the expressed emotion program and its purpose took place. The importance and benefit of the program were explained to all the caregiver's under the study to motivate them to follow instructions which were included in it.

-Each session started by greeting the caregiver's , assessing the caregiver's ‟ motivation for learning, getting feedback about what was given through the previous session, and present the objectives of the new topic, taking into consideration using simple language to suit the educational level of the caregiver's.

-The researcher emphasized the importance of adherence to each step of the expressed emotion program, and the rationale for and the benefits of engaging in each new behavior were explained. The researcher encouraged the caregiver's to express his/her readiness for changing their behavior.

-Motivation, problem solving and reinforcement techniques were used to enhance active participation for all caregiver's in the program plan. The booklet was handed for every caregiver's.

Phase III: Evaluation phase

The evaluation phase was done to determine the effect of expressed emotion management program on caregiver's burdens of patients with dementia through filling in the same tools again after implementation of the program .The collection of data after the application of the expressed emotion program lasted over a period of three months; starting from April 2018 to July 2018. Then follow up was done after three months of program implementation by using the same tools.

III. Administrative design

An official approval was obtained from Dean of Faculty of Nursing, Ain Shams University. A letter containing the title and the aim of the study and was directed to the director of Beni-suef psychiatric hospital for obtained his approval for data collection to conduct the study.

IV. Statistical Design:

The collected data were organized, analyzed using appropriate statistical significant tests. The data were collected and coded using the Computer Statistical Package for Social Science (SPSS), version 20, and was also used to do the statistical analysis of data to evaluate the studied subject's changes throughout the study phases (pre, post& follow up).

3. RESULTS

Table (1) shows that, the mean age of the studied patients of 57+7.6, majority of them (88%) their ages over than 60 years old while 68% of the studied patients were females. Concerning their level of education, 34% of the patients had primary education. Regarding their occupation, 88% of the studied patients were retirement from work .

Figure (1) shows that, 64 % of the studied patients their onset of the dementia ranging from 5 to 10 years, while 26% more than 10 years and only 10 % less than 5 years .

Table (2) it was observed that, the mean age of the studied family caregivers of 44±6.3, two thirds of them (66%) their ages ranged from 30 - < 40 years old and more than three quarters (76%) were daughters of the patients. Moreover, 74% of the caregivers had no enough income.

Figure (2) represents that, more than half (56%) of family caregivers had secondary education, while 26% of them had university education.

Figure (3) reveals that, nearly half (46%) of the studied family caregivers were employees, while 36% of them were work in manual craft .

Figure (4) clarifies that, 70% of studied family caregivers had high expressed emotion at pre intervention, this percentage decreased to 26 % during post intervention, then increased to 32 % at follow up phase.

Figure (5) clarifies that, 78% of family caregivers had high burden level at pre intervention but these percentage decreased to 32% at post intervention then slightly increased to 38% during follow up phase.

Table (3) represents that, there were highly statistical significant relations between family caregiver's total expressed emotion score and his\her age, degree of relation with the patient, occupation and family income ($P \leq 0.001$). While there was no statistical significant relation between family caregiver's total expressed emotion score and their education and social status ($p \geq 0.05$).

Table (4) illustrates that, there were highly statistical significant relations between family caregivers total burden score with their age, income and social status ($P \leq 0.001$). While there was a statistical significant relation between family caregivers total burden score and their education ($p \leq 0.05$). Also, there was no statistical significant relation between family caregiver's total burden score with their degree of relation and occupation ($P \geq 0.05$).

Table (5) denotes that, there was highly statistical significant correlation between studied family caregivers total burden score and their patterns of expressed emotion during pre, post and follow up phases of intervention (P≤ 0.001).

Table (1): Distribution of patients having dementia according to their socio-demographic characteristics (n=50).

Items	N	%
Age:		
45-60 years	6	12
Over 60 years	44	88
Mean ± SD :57±7.6		
Sex:		
Male	16	32
Female	34	68
Level of education:		
Illiterate	11	22
Primary	17	34
Secondary	10	22
University& above	12	24
Occupation:		
Unemployed	4	8
Workers	2	4
Retirement	44	88

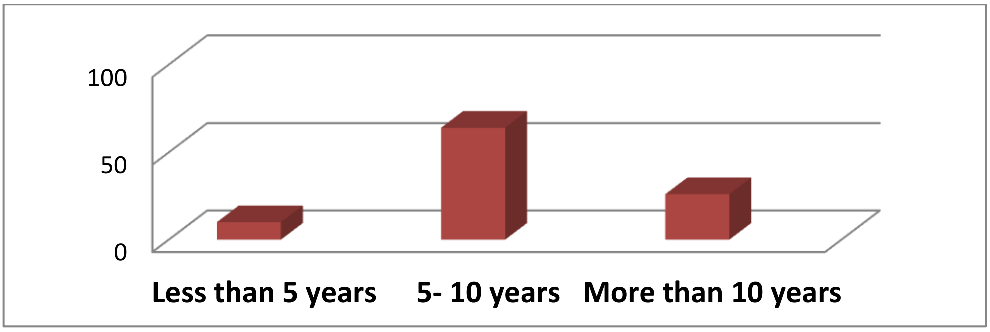

Figure (1): Distribution of studied patients according to types of dementia (n=50).

Table (2): Distribution of studied family caregivers according to their socio-demographic characteristics (n=50).

Items	N	%
Age:		
20 - < 30	9	18
30 - < 40	33	66
More than 40	8	16
Mean ± SD: 44 ± 6.3		
Degree of relation:		
Daughter	38	76
Son	12	24
Marital status:		
Married	35	70
Divorced	13	26
Widowed	2	4
Family income:		
Enough	13	26
Not enough	37	74

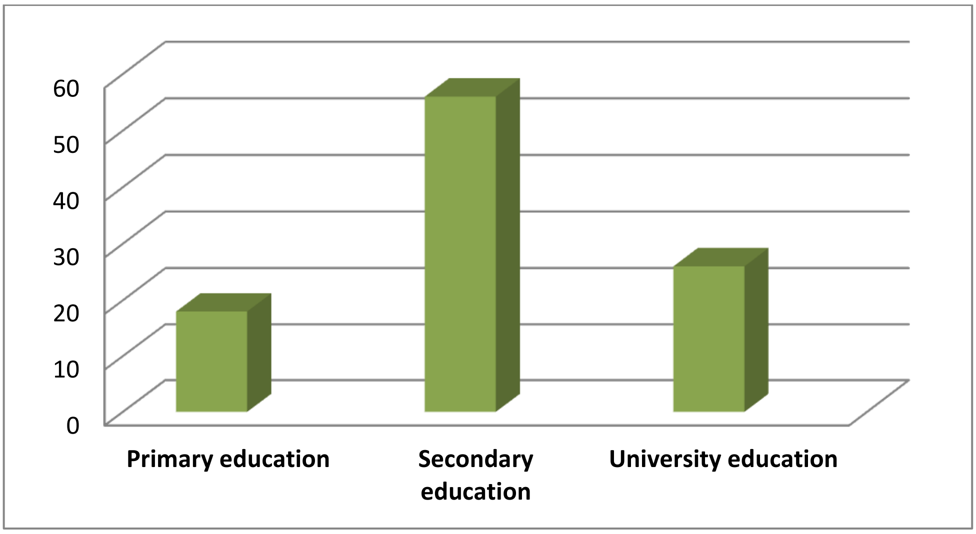

Figure (2): Distribution of studied family caregiver's according to their level of education (n=50).

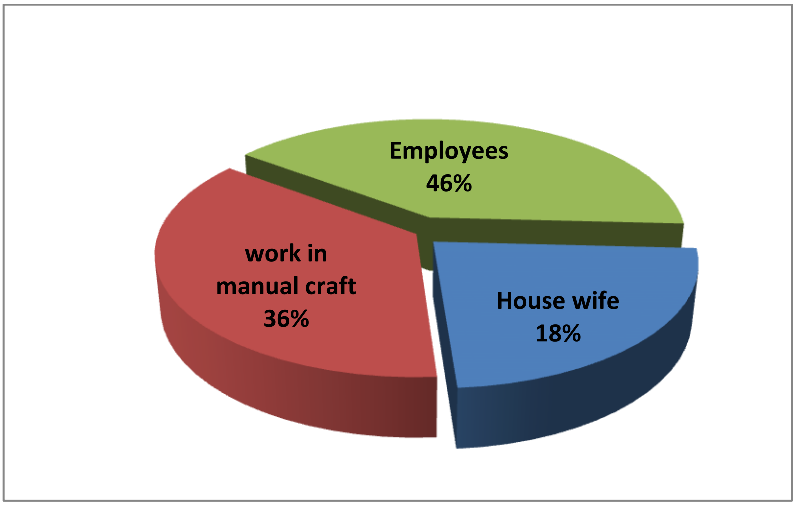

Figure (3): Distribution of studied family caregiver's according to their occupation (n=50).

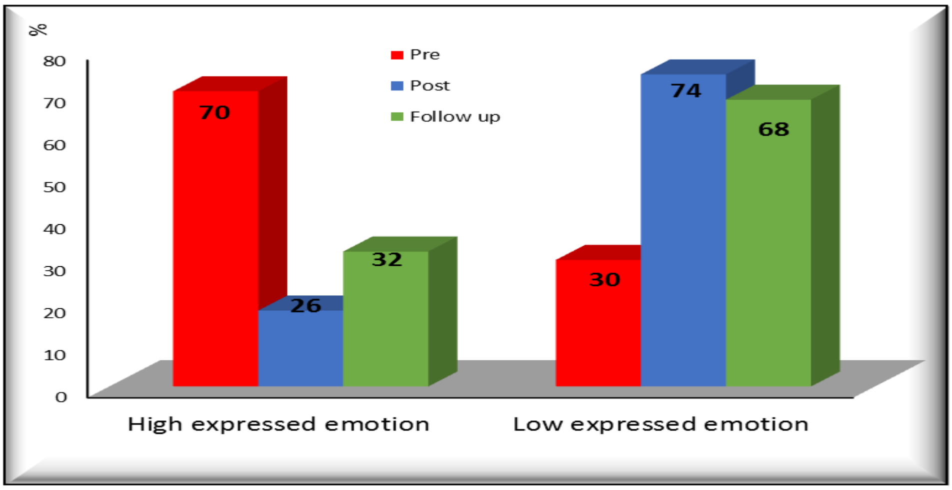

Figure (4): Percentage distribution of family caregivers regarding total expressed emotion score pre / post intervention and follow up (n=50)

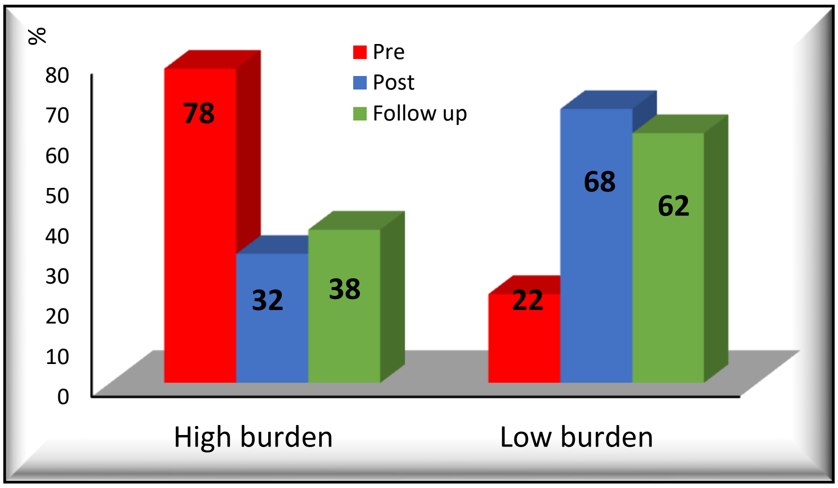

Figure (5): Percentage distribution of studied family caregivers regarding total burden score pre /post intervention and follow up (n=50)

Table (3): Relations between family caregiver's total expressed emotion score and their socio-demographic characteristics (n=50).

Total score of expressed emotion							
Demographic items		**High**		**Low**		**X2**	**P value**
		N	**%**	**N**	**%**		
Age	**20 – < 30**	**2**	**5.8**	**7**	**46.6**	**20.6**	**< 0.001**
	30 – 40	**30**	**85.7**	**3**	**20**		
	More than 40	**3**	**8.5**	**5**	**33.4**		
Degree of relation	**Daughter**	**33**	**94.2**	**5**	**33.4**	**21.3**	**< 0.001**
	Son	**2**	**5.8**	**10**	**66.6**		
Education	**Primary**	**7**	**20**	**2**	**13.4**	**4.7**	**. 9**
	Secondary	**22**	**62.7**	**6**	**40**		
	High education	**6**	**17.3**	**7**	**46.6**		
Occupation	**Workers**	**7**	**20**	**9**	**60**	**14.2**	**< 0.001**
	Un workers	**25**	**71.5**	**2**	**13.4**		
	House wife	**3**	**8.5**	**4**	**26.6**		
Family income	**Not enough**	**32**	**91.5**	**4**	**26.6**	**24.8**	**< 0.001**
	Enough	**3**	**8.5**	**11**	**73.4**		
Social status	**Single**	**7**	**20**	**8**	**53.4**	**6.4**	**.7**
	Married	**23**	**65.7**	**4**	**26.6**		
	Divorced	**5**	**14.3**	**3**	**20**		

- Highly statistical significant difference P≤ 0.001
- No statistical significant difference P ≥ 0.05

Table (4): Relations between family caregiver's total burden score and their socio-demographic characteristics (n=50).

Total score of burdens						**X^2**	**P value**
Demographic items		**High**		**Low**			
		N	**%**	**N**	**%**		
Age	**20 – < 30**	5	12.8	8	729	9.1	.01
	31 – 40	24	61.6	2	18.1		
	More than 40	10	25.6	1	9		
Degree of relation	**Daughter**	31	79.5	7	63.6	1.1	.27
	Son	8	20.5	4	36.4		
Education	**Primary**	8	20.5	1	9	10.3	.005
	Secondary	25	64.2	3	27.3		
	High education	6	15.3	7	63.6		
	Workers	10	25.6	6	54.6		

Occupation	**Un workers**	23	58.9	4	36.4	3.2	.10
	House wife	6	15.3	1	9		
Family income	**Not enough**	35	89.7	2	18.1	29.6	< 0.001
	Enough	4	10.3	9	81.9		
Social status	**Single**	8	20.5	7	63.6	17.4	< 0.001
	Married	30	76.9	3	27.3		
	Divorced	1	2.6	1	9		

- Statistically significant difference p≤ 0.05
- Highly significant difference p≤ 0.001
- No statistical significant difference P ≥ 0.05

Table (5): Correlation between family caregiver's expressed emotion score and their burden score (n=50).

Correlations						
Pattern of expressed emotion	**Caregiver's total burden score**					
	Pre		**Post**		**Follow up**	
	R	**P-value**	**R**	**P-value**	**R**	**P-value**
Criticism & hostility	0.419	<0.001	0.745	<0.001	0.680	<0.001
Over involvement	0.514	0.001	0.764	<0.001	0.740	<0.001
Warmth & positive remarks	0.406	<0.001	0.766	<0.001	0.734	<0.001
Total	0.486	<0.001	0.772	<0.001	0.833	<0.001

- Highly significant difference p≤ 0.001

4. DISCUSSION

The study findings (Table 1) revealed that majority of the studied patients with dementia their ages over than 60 years, and more than two thirds of them were females. This results could be due to the older age is strongly associated with dementia . Furthermore, women are more likely than men to develop dementia in their lifetimes for many reasons as, comparatively higher longevity of life in females and lack of the estrogen hormone after the menopause stage ,this may be linked to occurs of dementia among women .

Regarding the studied patients level of education and occupation (Table 1), it was found that one thirds of the studied patients had primary education while majority of them were retired from work. This result might be attributed to the traditional role of most elderly at rural areas as farmers, especially in the past which lead to dropping out from school for farming

activities. In relation to onset of disease (Figure 1), the current study clarified that, nearly two thirds of the studied patients the onset of disease ranging from 5- 10 years .This result could be due to, lack of awareness among Egyptian population about symptoms of dementia and the general assumptions of memory problems. So they don't early visit the doctor for treatment of dementia.

Regarding to the socio demographic characteristics of the family caregivers (Table 2), revealed that two thirds of the studied caregivers their ages ranged from 30 to 40 years and majority of them were daughters of the patients . This result can attributed to that the cargiven is often expected and performed by females because the women, unlike men, see their caregiving function as an extension of their usual role and their caregiving follows the expectation of the family and the society ,they may feel obligated to give more of themselves and guilty if they do not. One other hand, female caregivers provide more intensive care than do men for example, women are more likely to perform tasks such as cooking and cleaning.

The results of the current study (Table2) clarified that more than two thirds of the studied caregivers have insufficient income. This result may be due to, many caregivers often have tend to reduce working hours, take time off because of caregiving responsibilities . Also, medical treatment and the care of the patient with dementia require high costs, all of that can cause insufficient income.

Concerning to education and occupation of family caregivers (Figure 3, 4), it was found that more than half of family caregivers had secondary education, while nearly half were workers. In developing country as Egypt the low education level may contribute to the role of caregiver being assigned to family members. Thus, it is more probable that these people dedicate themselves to housework and caring for dependent family members as an extension of this activity.

In relation to total expressed emotion score of family caregivers of patient with dementia the findings of the present study (Figure 8), clarified that, nearly three quarters of the caregivers reported higher level of expressed emotion pre management program. This results were consistent with Hamad (2017) **,** in the study entitled "Personal constructs in dementia caregiving: the family caregiving experience of people living with dementia in Egypt", who noted that family caregivers of patient with dementia reported higher level of negative expressed emotion.

This result might be due to the nature of dementia and its symptomology place heavy demands on family caregiver and these demands can lead to negative expressed emotion toward their patients.

But, this results not in the same line with the study by Martínez, Pradas, Kwapil & Vidal, (2017), which entitled" Expressed emotion, distress and attributions in dementia in Mexico. They stated that, family caregivers of patient with dementia experienced low level of negative expressed emotion toward their patients. This result could be due to, some individual who carried the patient with dementia accept the cargiven without any negative emotions toward the patient.

In regards to the effect of the management program on expressed emotion, the results of the present study (Figure 8), clarified an improvement in the level of expressed emotion among family caregivers post program and follow up phases. This results were consistent with a study done by Girgis, Ahmed &Elsayied (2013), they evaluate the nursing intervention program for family caregivers of Alzheimer patient in Egypt ,which clarified that, there was a highly statistically significant difference between family level of negative expressed emotion towards their Alzheimer patient pre / post implementation of the program. This results might be due to the management program helped the family to know more about the dementia, ways of effective communication and coping skills to dealing with the patients, and its symptoms . All of that leads to decreasing in expression of negative emotion toward the patient.

Regarding the level of burdens among family caregivers, the findings of the present study (Figure 9), revealed that, more than three quarters of the caregivers reported higher level of burdens pre management program. This finding was consisted with the study conducted by Hamza, Mahmoud, Rafaat & Mohamed, (2018), which entitled" Assessment of level of function of dementia patients has an impact on the caregiver burden in Egypt" they, reported that majority of the participants suffer from sever burden . From the researcher point of view, this results could have been due to, caring for a person with dementia doesn't easy task and requires a lot of understanding and it impose a lot of burden on caregivers, also, behavioral and psychological symptoms of dementia seem to be challenging behaviors for the caregivers, It may become a main source of caregiver's burden. Furthermore the burden may be arise from the imbalance of caring demands in areas such as caregivers' personal time, social roles, physical and emotional status, financial resources, and formal care resources available for undertaking multiple roles.

On the other hand, these result was contradicted with study conducted by Siritipakorn&Muangpaisan (2015*)*entitled as "Associated factors of caregiver burden among family caregivers of dementia patients in a geriatric clinic, Siriraj hospital" they clarified that, caregivers of patient with dementia reported low level of burden. This inconsistency may be due to difference in cultures, level of economic status, nature of burden and social support from country to another. Furthermore, in some countries have accepted symptoms of dementia as part of normal ageing, thus reducing the sense of helplessness, frustration and reducing level of burden.

As regards to the effect of the management program on burden level, this result of the present study (Figure 9), showed that an improvement in the burden level among family caregivers post program and follow up phase. This result was supported by Sarhan &Elsayed (2018) , which studied the effect of instructional guidelines on caregivers' burden of care and quality of life in dementia patients in Egypt , which noted that, the instructional guidelines had a significant effect on the improvement of the caregivers' knowledge, practices and decrease the level of burden. This results may be due to a program session that done by the researcher, consisting of cognitive-behavioral component (e.g., changing unhelpful thoughts, assertive communication, relaxation skills) that helped the caregivers to handling many problems and reduce sense of burden.

One the other hand, this findings of the current study contradicted with Langman, (2013*)*, in the study entitled "Self-care activities for caregivers of persons with Alzheimer's disease and other dementias", who mentioned that, support group can provides emotional support, information and problem solving skills for caregivers but doesn't reduce burden level.

This contradiction may be due to, characteristics of family caregivers who differ from country to another country as age of the caregivers, ethnicity, gender, whether it is willing to give care, education, economic status, coping skills, beliefs, social support, all of that characteristics play an important role in response of family caregivers toward program intervention.

Regarding to the relationship between demographic characteristics of the studied family caregivers with their total expressed emotion (Table 7), this results of the present study illustrated that, there was highly statistical significant relations between the family age, degree of relation with the patient, occupation, income and social status with their total scores of expressed emotion ($p \leq 0.001$), also there was no statistical significant relations between total expressed emotion score and education ($P \geq 0.05$) .This result consistent with El-Shinnawy, Goueli& Nasr (2012), about the emotional involvement and burden in caregivers of patients with Alzheimer's disease in Egypt , they stated that, some variables such as occupation ,degree of relation, income and marital states of caregivers can impact on their expressed emotion . This results may be due to in some developing countries as Egypt the personal characteristics may influence the direction of the expressed emotion and play an exacerbating or buffering role in caregivers' emotional reactivity to daily life stress

On other hand , this results contradicted with the study by Knippenberg, Vugt, Ponds, Verhey & Germeys, (2018*)*, entitled "Emotional reactivity to daily life stress in spousal caregivers of people with dementia in Germany", which emphasized that, age, gender, occupation, income and care intensity didn't impact on caregivers' emotional reactivity to daily life stress. This result might be due to the nature of the factors that effect on the expressed emotion differs from country to country. In some country the caregiver resources, such as sense of competence, mastery, and coping strategies, may play important role in determine the level of expressed emotion .

Concerning to relationship between sociodemografic characteristics of the studied family caregivers with their total burden score (Table 8), the findings of the current study noted that, there was highly statistical significant relations between family caregivers total burden score and age, social status, family income and education ($p \leq 0.001$). Also, there was no statistical significant relation between family caregiver's total burden score and occupation, degree of relation ($P \geq 0.05$).

This finding were agreement with Salama, Ahmed& El-Soud (2012) ,which carried out a study about caregiver burden from caring for impaired elderly: a cross-sectional study in rural Lower Egypt, They found that , significant correlations between education and caregivers income with their level of burden.This findings could be due to, demographic characteristics of family caregivers which play on important role in determine the level of burden. When caregiver becomes older, they are worried about who will take care of their ill family member in the future, and the low salary would increase the financial problem related to providing care for patient with dementia. Also, level of education of the caregiver can support to have a more knowledge to deal with the stressful event. Furthermore, caregivers with higher income probably have more access to supportive services like home health aids and adult day health that may help minimize the burdens of caregiving.

On the other hand, this results disagreement with the study conducted by Rosdinom, Norzarina, Zanariah & Ruzanna (2013), which assessed the socio demographic profiles of caregivers and their association with burden of care in dementia in Malaysia, they found that no statistical significant relation between family caregiver's total burden score and their demographic characteristics. This disagreement may be due to in some places the level of burden in caring of patients with dementia was not significantly determined by the socio demographic characteristics of their caregivers, but other factors suspected to be related to burden, such as behavioral problems or cognitive impairment in patients.

Concerning to correlation between expressed emotion and level of burden among family caregivers of patient with dementia (Table 11), the present study represented that, there was highly statistical significant correlation between studied family caregivers total burden score and their patterns of expressed emotion during pre, post and follow up phases of intervention. This finding in harmony with the study conducted by Abdelmoneium (2016), about family home caregivers for old persons with dementia in the Arab Region: perceived challenges and policy implications in Egypt , who stated that, expressed emotion were determined as significant contributory factors with the burden . This result might by due to, expressed emotion and the burden of care are related to each other, also expressed emotion and burden measure aspects of the relationship between relatives and patients, families who have high level of worry, tension, negative feelings and expressed emotions experience cycles of grief, disappointment, also perceived their caring situation as more stressful situation, all of that can cause higher level of burden.

On the other hand this results disagreement with the study conducted by Nirmala, Vranda & Reddy, (2013), who assessed the expressed emotion and caregiver burden in patients with dementia in India and found that subjective and objective burden of the caregivers was not associated with the level of expressed emotions. This result might be due to differ in perceived of expressed emotion and burden from people to other. Furthermore, in some country the cycle of expressed emotion during stages of the dementia is more related to personal reactions to caregiving than to the direct and indirect tasks of care or the burden level.

5. CONCLUSION

In the light of the current study, it can be concluded that, highly statistically significance improvement regarding total burdens score among family caregivers post and follow up implementation of the expressed emotion management program. Also, there were highly statistically significant positive correlations between family caregivers total burden score and their patterns of expressed emotion during pre, post and follow up implementation of expressed emotion management program.

6. RECOMMENDATIONS

- Replication of the current study on a larger sample is recommended to achieve generalization of the results and wider utilization of the designed program.
- Designing a systematically continuous family intervention programs in psychiatric hospitals that provide proper information and psychological support to help caregivers of patient with dementia to, handle difficult thoughts and emotions, reduce negative expressed emotion and reduce sense of burden.
- Work on the development of support system in Beni Suef governorate and work on developing their services to help the family overcome the obstacles that they face in caring for the dementia patient.
- A simplified, comprehensive and illustrated Arabic guided images booklet about expressed emotion and types of burden related to dementia, should be distributed for each newly admitted family caregivers of patient with dementia.

REFERENCES

[1] **Abdel Hamid ,AA .,Dessokib,HH.,Gomaaa,MA., Soltanc,MR., Abdel Hakimb,AA., Ahmed,MS. (2018).** Cognitive impairment in elderly depressed and dementia patients in relation to plasma lipids .Egypt J Psychiatric 39:57–65**.**

[2] **Abdelmoneium,A.O. and Alharahsheh, S.T. (2016)** Family Home Caregivers for Old Persons in the Arab Region: Perceived Challenges and Policy Implications. Open Journal of Social Sciences, 4, 151-164.

[3] **Berksun OE.(1992)** .Family factor in schizophrenia: Development and adaptation of expressed emotion scale. Postgraduate Thesis, University of Ankara. (Turkish)

[4] **Borsje, P., Hems, M.A., Lucassen, P.L., Bor, H., Koopmans, R.T., Pot, A.M. (2016):** Psychological distress in informal caregivers of patients with dementia in primary care: course and determinants. Fam Pract. 2016;11.

[5] **Cheng, S.T. (2017):** Dementia Caregiver Burden: a Research Update and Critical Analysis. Curr Psychiatry Rep.; 19 (9): 64

[6] **Elshahidi,MH., Elhadidi,MA., Sharaqi,AA., Mostafa , A ., & Eizhery,MA(2017).** Prevalence of dementia in Egypt: a systematic review. Neuro psychiatr Dis Treat. 2017; 13: 715–720

[7] **El-Shinnawy,H., Goueli ,T and Nasr,M.(2012)** Emotional involvement and burden in caregivers of patients with Alzheimer’s disease. Egyptian Journal of Psychiatry , 33:149–157

[8] **Erin, B., Shuman, M.P.H., & Ignaczak, B.S. (2016):** Education Resources for People with Dementia and Their Family Caregivers. Available https: //aging.idaho.gov/ caregiver/PWD_CG_Education_Resources

[9] **Girgis,NM., Ahmed,HI., and Elsayied,HA.(2012).** Nursing Intervention for Family Caregivers of Alzheimer Clients. Journal of American Science, 2012;8(2)

[10] **Hamad, EO.(2017**). Personal Constructs in Dementia Caregiving: The Family Caregiving Experience of People Living with Dementia in Egypt . Electronic Thesis and Dissertation Repository. 4472. https b:// ir. lib. uwo. Ca /etd/4472

[11] **Hamza, S.A., Mahmoud, H.F., Rafaat, V.A., and Mohamed (2018):** The Level of Function of Dementia Patients has an Impact on the Caregiver Burden. J Gerontol Geriatr Res 7: 464.

[12] **Hunter, S., & Miller, C. (2016).** Miller's nursing for wellness in older adults. North Ryde, Australia: Lippincott Williams & Wilkins Pty Ltd

[13] **Knippenberg, R.J.M., Vugt, M.E.D., Ponds, R.W., Verhey, F.R.J. & Germeys, I.M. (2018):** Emotional reactivity to daily life stress in spousal caregivers of people with dementia: An experience sampling study. PLoS ONE 13(4): e0194118. https: //doi.org/10.1371

[14] **Langman, N. (2013):** Increasing self-care activities for caregivers of persons with Alzheimer's disease and other dementias to reduce burden and depression. University of Massachusetts, Doctor of Nursing Practice (DNP) Projects College of Nursing. Available at https: // scholar works. umass.edu/cgi/ view content. cgi?

[15] **Lepore, M., Ferrell, A., Joshua, M., Wiener (2017):** Living Arrangements of People with Alzheimer's Disease and Related Dementias: Implications for Services and Supports Issue Brief Research Summit on Dementia Care: Building Evidence for Services and Supports Prepared for Rohini Khillan, MPH Office of the Assistant Secretary for Planning and Evaluation Disability, Aging, and Long-Term Care Policy, RTI International 701 13th Street, NW Suite 750 Washington, RTI Project Number 0215288.002.000.001

[16] **Martínez, T.D., Pradas, C.M., Kwapil, T.R., & Vidal N.B. (2017):** Relatives' expressed emotion, distress and attributions in clinical high-risk and recent onset of psychosis. Psychiatry Res .; 247: 323-329.

[17] **Nirmala, B.P., Vranda, M.N., & Reddy, S. (2013):** Expressed emotion and caregiver burden in patients with dementia. Indian J Psychol Med.; 33 (2): 119-22

[18] **Rosdinom, R., Norzarina, M. Z., Zanariah, M. S., & Ruzanna, Z.Z. (2013):** Sociodemographic Profiles of Caregivers and Their Association with Burden of Care in Dementia. MJP-02-04-11.

[19] **Safavi, R., Berry, K., & Wearden, A. (2017);** Expressed Emotion in relatives of persons with dementia: a systematic review and meta-analysis. Vol. 21, Iss. 2 Aging & Mental Health.

[20] **Siritipakorn, M.N.S. & Muangpaisan, M.D.W. (2015):** Associated factors of caregiver burden among family caregivers of dementia patients in a geriatric clinic, Siriraj hospital. Journal of Nursing Science & Health. Volume 38 No.2

[21] **Salama,RAA.and Abou El-Soud,FA.(2012).** Caregiver burden from caring for impaired elderly: a cross-sectional study in rural Lower Egypt. ITALIAN JOURNAL OF PUBLIC HEALTH IJPH , Volume 9, Number 4 .

[22] **Sarhan,AEM&Elsayed,DMS.(2018).** Effect of Instructional Guidelines on Caregivers' Burden of Care and Quality of Life in Egypt . IOSR Journal of Nursing and Health Science.Volume 7, Issue 1 Ver. , PP 15-26

[23] **Wang, X., Chen, Q., & Yang, M. (2017):** Effect of caregivers' expressed emotion on the care burden and hospitalization rate of dementia . Patient Prefer Adherence. 2017; 11: 1505–1511.

[24] **World Health Organization (2015)**, "Dementia", Fact Sheet No. 362, www.who.int/ mediacentre/factsheets/ fs362/e.

[25] **Zarit, S. H., Reever, K. E., Back-Peterson, J. (1980).** Relatives of the impaired elderly: correlates of feelings of burden. *The Gerontologist*, 20, 649-655.