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Effect of psychological first aid program on anxiety level and perceived stress among elder persons

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***Abstract*---**Background: As the global population ages, there is increasing concern about mental health. Globally a large number of elder persons suffer from different mental disorders. Within aging, elder persons may experience certain life changes that impact their mental health, in such as anxiety and stress. Therefore, Psychological First Aid (PFA) as program intervention is designed to eliminate anxiety level and perceived stress among elder persons. Aim: Evaluate effect of psychological first aid program on anxiety level and perceived stress among elder persons. Design: a quasi-experimental research design pre-test post-test was used. Subjects: A convenience sample of one hundred (100) elder persons fulfilled criteria included. Setting: The study was carried out at Al Sabeen Fadan primary health care

center, Cairo governorate, Egypt. Tools: Socio-demographic and clinical data of community dwelling older adults structured interview questionnaire form, Visual Analog Scale and Perceived Stress Scale (PSS) Results: Psychological First Aid program has highly statistically significant effect on total improvement of anxiety level and perceived stress among elder persons. 46% &47% of elder persons were suffering from severe and extreme anxiety level respectively before program implementation compared with 64%& 36% had mild and moderated level of anxiety after program application (p= <0.001*). 78% elder persons complained from high level of stress before program implementation compared to 65% of elder persons had low level of stress after program intervention application with (<0.001*). Conclusion: Psychological First Aid program interventions implementation considered an effective program in eliminate anxiety level and perceived stress among elder persons.

***Keywords*---**anxiety level, elder persons, psychological, stress.

Introduction

As the global population ages, there is increasing concern about mental health. Globally a large number of elder persons about more than 20% suffer from different mental disorders (1, 2). Within aging, elder persons may experience certain life changes that impact their mental health, in such as anxiety and stress. Anxiety is being more ubiquitous among elder persons. Anxiety is considered the sixth leading cause of disability worldwide (3). Anxiety is a negative psychological emotion related to pain and mental discomfort (4). Studies have shown that 15–52% of elder persons are affected by anxiety (5). Richardson et al. reported that more than 27% of elder persons experienced anxiety symptoms, which impact directly to their mental health (6). Furthermore, southwest Germany found Anxiety 13.9% of elder persons complained from anxiety symptoms (7). A study conducted in Egypt reported that more than of 65% of elder persons suffer from anxiety (8).

Elder persons who suffer from anxiety have clinical features in such as anxiety have difficulty in paying attention, feeling drowsy, difficulty in breathing and sweating may appear. Also, elder persons with anxiety may complaints from digestion problems as appetite disturbance, nausea and diarrhea or may have feeling of chest pain, headaches and confusion. Visual problems, muscle tension, fatigue and irritability are considered as signs and symptoms of anxiety among elder persons. Moreover, anxiety symptoms among elder persons may appear in avoidance of activities, places, people and even insomnia. Furthermore, anxiety among the elder persons may associate with pain and loneliness (9).Anxiety among elder persons may lead to serious consequences in such as social withdrawal, poor quality of life, sever physical and mental disorders which increased morbidity and mortality rate (10, 11).

Stress is the natural reaction of human body when challenges occur. It can result in many different physical, emotional and behavioral responses. Perceived stress

is the subjective concept of feelings or thoughts about one's ability to cope with problems or difficulties (12, 13). Perceived stress is associated within aging; stress has negative consequences on both physical and mental health among elder persons (14). Perceived stress is associated with depression, loneliness, fatigue, and physical inactivity, cardiovascular diseases and obesity among older persons. Perceived stress may lead to mental disorders in such psychosis leads to increase morbidity and mortality rate among elder persons (15). A study conducted in Saudi Arabia, **(2020**) identified that almost of elders had anxiety, level of stress and loneliness (16). A study conducted in Egypt **(2021),** reported that most of the participants had moderate stress and suffered from high level of anxiety (17).

Psychological First Aid is a psychological educational program is used to improve knowledge and attitude toward mental health wellbeing by reducing anxiety and stress among elder persons. Psychological First Aid enhances feeling safe, connected to others, calm and hopeful through having access to social, physical and emotional support. Psychological First Aid Strategies improve elder persons their abilities to help themselves, other individuals and communities (18). Psychological First Aid is a strategy aimed to reduce psychological distress in such anxiety and perceived distress among elder persons by providing a caring, sense of comfort, and education effective coping strategies for anxiety and stress. Psychological First Aid empowers elder persons by enhance their strengths in coping skills, increase their resilience and provide natural support networks. Furthermore, Psychological First Aid helps elder persons to improve their ability to recognize a mental health disorder; increases the confidence and ability to provide the appropriate first aid response; improves elder person's capacity to seek help for their own mental health problems; and reduces stigmatizing attitudes and beliefs. Psychological First Aid teaches elder persons how to feel confident and more willing to support themselves and others in seeking help for mental health problems which improve their total health and wellness (19,20). Therefore, the present study aimed to evaluate the effect of Psychological First Aid program on anxiety level and perceived stress among elder persons.

Purpose of the study:
The present study aimed to evaluate the effect of Psychological First Aid program on anxiety level and perceived stress among elder persons.

Research hypothesis:
1. Elder persons who receive Psychological First Aid program exhibit lower level of anxiety level after the application of study intervention program than before it.
2. Elder persons who receive Psychological First Aid program exhibit lower level of perceived stress after the application of study intervention program than before it.

Materials & Methods

Design: The present study followed quasi-experimental research design (one group pre-test post-test).
Setting: The present study was carried out at Al Sabeen Fadan primary health care center, Al Moquattam zone, Cairo governorate, Egypt. Al Moquattam primary

health care center is mainly serves elder persons who coming for visiting family medicine clinics seeking treatment or for follow up frequently.

Subjects: A convenient sample of one hundred elder persons (100) of those who attended previous mentioned setting included the present study. Sample size estimated by means of Epi info 7 software program using the parameters as follows: population size 240, expected frequency 50%, Maximum acceptable error 10%, In confidence co-efficient95% and sample size. 96. The program revealed sample size of 96 of elder persons and researcher included 100 who fulfilling following criteria; aged 60 years and above, both sexes, had level of anxiety from moderate to severe 2-10 score on Visual Analogue Scale of Anxiety and reported moderate to severe level of stress score from14 to 40 on Perceived Stress Scale and willing to participate in the study

Tools of the study:

Three tools were used for data collection as follows:

Tool I: Socio-demographic and clinical data of elder persons structured interview questionnaire form was developed by the researcher, based on reviewing related literatures to assess elder persons socio-demographic data and includes three parts.

Part 1: Socio-demographic and clinical data of elder persons and included items in such as age, sex, marital status, educational level, residence place, current work, monthly income, health conditions and physical status.

Part 2: Socio-demographic and clinical data of elder persons and included items in such as health life style; nutritional status, fluid intake per day , number of meals, vegetables and fruits contains meals, caffeine consumption, practicing exercises, sleeping hours per day, napping time, feeling of comfort after waking up and avoidance of risk behavior in such as cigarette smoking.

Part 3: Socio-demographic and clinical data of elder persons and included items in such as social and psychological health status; ability for relaxation easily and express inner feelings, ability to adapt appropriately with stressors, have family and friends and able to talk with them for personal life, ability to ask for help from family and friends and current hobbies.

Tool II: Visual Analog Scale (VAS): This scale was developed by **Cline (1992)** and was used to assess level of anxiety of elder persons. It consists of a 100 mm horizontal line labeled at the left with (not at all anxious) and the right with (extremely anxious), elder persons were asked to indicate their anxiety levels by placing x on the VAS. The intended of their feeling is scored by necessary the distance from lowest anchor point to the subject's mark. This tool was translated into Arabic by researcher and approved to be valid and reliable r = 0.814. The Arabic version of this scale was used in the present study. Scoring system was Score from 0 - < 2 indicate not at all anxious, from 2 - < 4 indicate mild anxiety level, 4 - < 6 indicate moderate anxiety level, from 6 - < 8 indicate severe anxiety level and score from 8 - < 10 indicate extreme-Panic anxiety level (21).

Tool III: Perceived Stress Scale (PSS): This scale was developed by Cohen et al., (1983) to assess psychological stress. It is a self-reported questionnaire to assess degree of elder persons for appraises stressful situations in their lives. This tool consists of 10 statements measuring feeling of upset, nervousness, and stressed, ability to control irritable situations and ability of community dwelling older adults to be on the top of things, feeling of boredom, and feeling of

acceptance of life situations. It was translated into Arabic by researcher and proved to be valid and reliable r = 0.70. The Arabic version of this scale was used in this study. The total score is 40 and it is classified as follows; score 0-13 considered as low level of perceived stress, from 14 - 26 as moderate level and scores from 27 - 40 as high level of perceived stress (22).

Method:

The study was carried out through three phases, a preparation phase, implementation phase, and evaluation phase as follows:

I-The preparation phase:

1. Permission to carry out the present study from the responsible authorities and directors of the study settings was obtained after explanation of the purpose of the study, the date and the time of data collection.
2. Survey was done at Al Sabeen Fadan primary health care center, Al Moquattam zone, Cairo governorate by the researcher to select clinics suitable data collection for the study.
3. Tool I (Socio-demographic and clinical data of elder persons structured interview questionnaire form) was developed by the researcher based on relevant literature to collect the necessary information of the study subjects and was tested for its content validity by 7 experts in the related fields and the required modifications were done accordingly.
4. Tool II (Visual Analog Scale (VAS) This scale was translated into Arabic by the researcher and was used to assess level of anxiety of elder persons. It was tested for its reliability using Alpha cronbach test which equal 0.814. It was applied on 10 of elder persons at Al Sabeen Fadan primary health care center and not included in the study. Also content validity was tested by 7 experts in the related fields and required modifications were done accordingly.
5. Tool III: (Perceived Stress Scale PSS): This scale was translated into Arabic by the researcher and was used to assess level of perceived stress of elder persons. It was tested for its reliability using Alpha cronbach test which equal 0.70. It was applied on 10 of older adults at Al Sabeen Fadan primary health care center and not included in the study. Also content validity was tested by 7 experts in the related fields and required modifications were done accordingly.
6. The necessary approval and permission to conduct the study was obtained from the Research Ethics Committee, Faculty of Nursing, Modern University for Technology and Information, Cairo, Egypt.
7. A pilot study was done on 10 older adults at Al Sabeen Fadan primary health care center and not included in the study to assess the applicability, clarity and feasibility of the study tools and necessary modifications were done accordingly.
8. Informed consent was required from all the study subjects who fulfilled the inclusion criteria before including them in the study.
9. The researcher planned, designed and structured seven sessions for program implementation and conductions based on relevant literature review as **sessions mentioned in table I.**

Implementation phase:

1. The researcher designed a schedule for data collection. The researcher used

to visit four clinics of the study settings to identify elder persons admitted to these clinics based on a pre-designed schedule.

2. The researcher used to visit these clinics to introduce herself to the senior responsible physician and nurse of the clinics. Then, she approaches and greets the assigned elders who fulfilling the study criteria. The researchers interviews the study subjects to collect the required data using tool I, II and III. Interview was conducted individually with each older adult and time of interview ranged from 45-60 minutes.
3. The researchers assess level of anxiety and perceived stress of elder persons using Tool II and III.
4. The researcher grouping the study subjects for implement the study program interventions as scheduled interview with several in persons meetings in previously mentioned setting and the researchers develop WhatsApp group for communicate and apply any additional information regarding program interventions with study elder persons subjects during implementation phase.
5. The researcher conducted program interventions of using Psychological First Aid key component and principle as feel safe, sense of calm, sense of control and self-efficacy, social connection, and hope **as shown in figure 1**.
6. The researcher constructed illustrative PowerPoint presentations, showed video and distributed leaflets for elder persons study subjects during the implementation of study interventions program sessions. Also the researchers interviewed communicated individually with each elder persons who seeking individual help.
7. The researcher helped elder persons study subject to expressing their concerns and feelings, listening to ideas, and being responsive when the topic of mental health problems comes up. The researcher enforcing reassuring with study subjects during sessions.
8. The researcher using different instructional method, group discussion, critical thinking, problem solving and brain storming skills to increase knowledge among study subjects regarding mental health, improving someone's confidence and intention to help, and reducing the stigma towards mental illness.
9. The researchers open different channel of communication for answering studies elder persons inquires and questions through in person conversation or by whatssApp message or even by phone calls.

Evaluation phase:

1. After the implementation of the study interventions, the researcher measure anxiety level using Tool II and perceived stress level using Tool III immediately after the application of the study intervention program.
2. The data collection process started from the beginning of February 2021, until the end of January 2022.
3. The evaluation of the effectiveness of the proposed interventions was determined through using the proper statistical analysis.

Ethical considerations

An informed written and verbal consent was obtained from each study subject included in this study after an explanation of the study purpose. Study subjects'

privacy and anonymity were maintained along with the confidently of the collected data. The researchers informed the study subjects that they have the right to withdraw from the study at any time.

Statistical Analysis

After data were collected it was revised, coded, and fed to statistical software IBM SPSS version 26. The reliability of the tools was determined by Cronbach's alpha. Frequency tables and cross-tabulation were used to illustrate the results. Quantitative data were summarized by the arithmetic mean, standard deviation, and mean score percent. All statistical analysis was done using two-tailed tests and an alpha error of 0.05. P-value less than or equal to 0.05 is statistically significant.

Results

Table 2 shows the distribution of the studied elder persons according to their socio-demographic data. The table illustrate that the age of the studied ranged from 60 to 65 years 17%, from 66 to 70 years (35%) and over 70 years (48%). Females represented more than half (55%) of the studied elder persons. As regard to marital status, it was observed that two thirds 65% of the studied elder persons were married, while 7% of them were divorced. Regarding level of education, more than one third (35%) of the studied elder persons were illiterate. Furthermore, slightly more than half 58% of the studied elder persons were living at their homes with families, while 42% of them stay alone at home. Concerning to the job, it was observed that the majority 88% of the studied elder persons weren't working currently. It was clearly noticed that more than half 54% declared that their income is sufficient. The majority 87% of the study subjects were suffering from health problem. 88% of them used earphone, more than half 58% didn't have any vision problems and 91% didn't wear eyeglass. The table also highlights the problem in the movement of the studied elder persons, it was observed that more than half 53% didn't have any problem in the movement and 79% of them didn't use movement aid.

Table (3) shows the distribution of the studied the elder persons according to their Life style. It was found that the half (50%) of the studied elder persons were nonsmoker. The majority (88%) of them eat different fruits and vegetables per day. Moreover, near of half 48% of elder persons take around from 2 to 3 liters fluid per day. It was clarified that less than half 47% of them eat less than two meals per day. More than three quarters 76% of the studied elder persons didn't drink caffeine or tea during the day.

The same table portrayed that two thirds (60%) of the studied elder persons didn't practice any exercise, while only 5% practice exercise regularly. More than two third 62% of the studied elder persons slept less than 6 hours per day. Slightly less than three quarters 72% of them didn't take enough time for the rest. More than three quarters 77% of the studied elder persons didn't take the nap.

Table (4) shows the disruptions of the studied elder persons according to their social and psychological life style. The majority 93% of the study subjects unable to relax or express there feeling. The table also showed that the majority 88% of

the studied elder persons can't deal with stress in an appropriate way. More than three quarters 81% of them didn't have friends or relatives to talk with them and also didn't ask them for help. Moreover, more than three quarters 83% of study subjects elder persons didn't have any hobbies.

Table (5) portrays the distribution of the studied elder persons according to visual analog scale for anxiety level pre and post program intervention. It was cleared noticed that 46% &47% of elder persons were suffering from severe and extreme anxiety before program application respectively compared with 64%& 36% of studied elder persons had mild and moderated level of anxiety after program application with highly statistically significant difference was noticed between the elder persons in each of the two phases, pretest and posttest MH =9.370* (p= <0.001*)

Table (6) illustrates the distribution of the studied elder persons according to perceived stress pre and post intervention. Overall, it is apparent from the table that there is a highly significant difference among studied elder persons in each of the two phases; pretest and posttest MH = 9.289* (p= <0.001*). 78% elder persons complained from high level of stress before program implementation compared to 65% of elder persons had low level of stress after program intervention application with MH = 9.289* (p<0.001*)

Discussion

Anxiety is considered as a common mental condition among elder persons as approximately 10-20% of elders experience anxiety symptoms as reported by **World Health Organization 2017**(24). This prevalence of anxiety among elder persons can be explained by several factors as aging related changes itself in such as retirement, decrease monthly income, loss spouse or friends, health deterioration and chronic conditions which can elevate level of anxiety. Anxiety symptoms as excessive worrying, irritability, difficulty concentrating, sleep disturbances, and feelings of dread which affect elder person's physical, social and psychological wellbeing and have serious impact on their overall health and wellness.

Perceived stress is significantly associated with aging as elder persons may living alone, not currently working, feel loneliness or loss of life satisfactions which a play a crucial role in developing stress among them. Stress lead to inability to relax and express their emotions, enhance irritability, experience headaches, sleeping problems, loss of appetite or changing eating habits or may lead to tobacco and other substances among elder persons. Anxiety and perceived stress is not diagnosed and become persistent may be started affecting elder persons daily functioning. So, it is a crucial role for caregivers and healthcare providers to be aware of these emotional and psychological symptoms to provide appropriate support and intervention for elder persons who struggling with anxiety and stress (25).

Therefore, the present study aimed to evaluate the effect of Psychological first Aid program interventions on anxiety level and perceived stress among elder persons. The present study revealed that 55% of study subjects were female, and more

than half of study elder persons live in their own homes with families. The present study reported that 48% were aged 70 years and above and this can be explained as aging increase, the incidence of anxiety and stress increased and can be clarified as become old the stressful situations become more obvious in related physical, psychological and social health deterioration. The present study findings in accordance with other study conducted by **MM Barakat et al., (2019)** who investigated the anxiety that with advanced aging and reported more than two third of study subjects suffered from anxiety (26). The majority of present study elder persons (93.0%) were unable to easily relax and express their feeling. This result finding is with in agreement with **Alice Moult et al., (2020**) who mentioned that with later life increase distress and anxiety among elders (27). Furthermore, **Franziska D. Welzel et al, (2019)** explained that elder persons suffer from high prevalence rate of anxiety, experience tension which can interrupted their activities of daily living and social relationships (28).

The present study revealed that almost all of studied elder persons 46% &47% were suffering from severe and extreme anxiety before program application respectively compared with 64%& 36% of studied elder persons had mild and moderated level of anxiety after program application with highly statistically significant difference was noticed between the elder persons in each of the two phases, pretest and posttest MH =9.370* (p= <0.001*). This study findings can be interpreted by the effectiveness of application of Psychological First Aid (PFA) Program on minimize anxiety among elder persons through initial psychosocial support approach, increase awareness about mental health by educational information, increase sense of comfort, practical assistance or even referral to specialist for needed cases. The present study results findings is in the same line with study conducted by **Ling Wang et al., (2021)** who enhance and reinforce of Psychological First Aid training to decrease distress situation and life emergencies crisis (29). This can be clarified by Psychological First Aid (PFA) shows a positive effect for reducing anxiety and facilitating adaptive functioning in the immediate and intermediate term after program implementation. Also, The present study findings is in accordance with other result study conducted in Egypt by **Abd El-Fatah et al**., **(2022)** who clarified that there were total improvement in total anxiety level among older adults in post Psycho-Educational implementation compared to pre intervention application (30).

The present study showed that there is a highly significant difference among studied elder persons perceived stress in each of the two phases; pretest and posttest MH = 9.289* (p= <0.001*) after the implementation of Psychological First Aid program than before it. 78% elder persons complained from high level of stress before program implementation compared to 65% of elder persons had low level of stress after program intervention application with MH = 9.289* (p<0.001*). This result in the same line with **Becqué, et al., (2019)** who showed statistically substantial development in tension of older people after implementation of program intervention (31). Furthermore the present study result is in accordance with other two studies by **Figueroa et al., (2022)& McCart et al., (2020)** which mentioned that the application of Psychological First Aid lead to decrease stress as frequently used breathing exercise techniques, progressive muscle relaxation technique, and mindfulness practice(32,33). Furthermore, **Figueroa et al., (2019)** who demonstrated that normalizing stress reactions and

promoting problem-focused coping are vital techniques to enhance calmness and reduce stress (34)**.** Moreover, Rapid Psychological First Aid model which assessing need by listening and prioritizes the urgent need to intervene as investigated by **Despeaux et al., 2019** is in agreement with the present study results (35). Conversely, the present study findings is in disagreed with **El-Zeftawy, & Sabra, (2018)** who clarified that most of elders suffered from tense mood after implementation of psycho- educational program (36). Furthermore, **Baughman, et al., (2020)** illustrated elevated in tension level among elder patients after educational interventions which incongruence with the present study result (37).

The present study findings revealed total improvement in the anxiety level and perceived stress among elder persons after Psychological First Aid program interventions implementation than before it. The present study findings in accordance with other study findings conducted by **Shah et al., (2020)** which reported that thriving adoption of PFA can be attributed to its widely accepted strengths, including its simplicity, timely support, as well as its flexibility that can be tailored to elder person's needs and also the application of Psychological First Aid has been extended to supporting individuals experiencing physical injury or homelessness(38).

Conclusion

Based on the present study results, it can be concluded that Psychological First Aid program interventions implementation considered as an effective program in minimizing anxiety level and perceived stress among elder persons.

Recommendations

First Aid Program Intervention can be re applied among other study subjects as youth or adults who suffering from traumatic stress. The researcher willing to disturbed online instructional booklet and brochures to increase awareness and importance about Psychological First Aid Program interventions for all aged group which respectively increase community awareness about PFA.

Abbreviations:
PFA: Psychological First Aid
VAS: Visual Analog Scale
PSS: Perceived Stress Scale

Ethical approval and consent to participate

All methods were carried out in accordance with relevant guidelines and regulations declaration of Helsinki (DoH-Oct2008). An informed written and verbal consent was obtained from each study subject included in this study after an explanation of the study purpose" and "The necessary approval and permission to conduct the study was obtained from the Research Ethics Committee, Faculty of Nursing, Modern university for Technology and Information, Cairo, Egypt. January, 2021.

Consent for publication
Written informed consent" was obtained from all subjects and/or their legal guardian(s) for publication of identifying information/images in an online open-access publication.

Availability of data and materials
Data will be available from the authors on reasonable request.

Competing interests
The authors declare that there is no conflict of interest.

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Table (1):

Sessions	Duration	Content
First session	45 minutes	-The researcher defined of anxiety -The researcher explained: • Signs and symptoms of anxiety • Level of anxiety • Factors associated with anxiety • Health consequences of anxiety -The researcher notified studied elder persons with physical, social and psychological age related changes which aggravated anxiety level. The researcher used ice braking techniques to enhance mutual communication between the study subjects themselves and also with researcher.
Second session	45minutes	-The researcher defined perceived stress -The researcher explained: • Signs and symptoms of perceived stress • Level of stress • Factors associated with stress • Health consequences of stress -The researcher notified studied elder persons with physical, social and psychological age related changes which aggravated stress level.
Third session	60 minutes	**Strategies for anxiety and stress management follows PFA instructions:** -The researcher started the sessions about explains for studied elder persons the importance of strategies for anxiety and stress management and mentioned it will be in the next five sessions as follows: **1. Slow breathing exercise technique**: -The researcher explained importance of slow breathing exercise technique. -The researcher practiced slow breathing exercises as role model with elder persons and helped in slow down breathing and promote feeling of calmness. -The researcher advised studied elder persons to practice it by 15 minutes three times daily as follows: • Count to three as breathe in slowly. • Count to three as breathe out slowly. **2. Stay in the present moment** The researcher advised study elder persons try to remove terrible thoughts which not happened yet and live in present and enjoy moment.
Fourth session	60minutes	**3. Progressive muscle relaxation:** -The researcher explained importance of progressive muscle relaxation. -The researcher explained practicing exercise with elder persons which can help reduce the feelings of muscle tension that often comes with anxiety. The researcher advises studied elder persons to practice it by 15 minutes three times daily as follows

Sessions	Duration	Content
		• Find a quiet location. • Close your eyes and slowly tense and then relax each of your muscle groups from your toes to your head. • Hold the tension for three seconds and then release quickly. **4. Daily practice of meditation** -The researcher explained to study elder persons to the importance to spent time in nature and try to meditate every morning and every evening for 15-30 minutes which reduce stress and anxiety. -The researcher explained steps of one meditation practice as set quietly for few minutes do nothing. May go to sleep during meditation, and that is okay. When you wake up after being asleep, meditate for a few more minutes and then lie down and rest for 4-5 minutes. -The researcher mentioned steps of other meditation practice as visualization of good image of situation and place which enhance calmness.
Fifth session	60 minutes	**5. Food supplement:** -The researcher explained the importance of diet in reducing anxiety and stress in such as mineral magnesium helps muscle tissue to relax, and a magnesium deficiency can contribute to anxiety and insomnia. Make sure your daily diet includes foods such as wholegrain cereals, leafy green vegetables and low-fat dairy products. - The researcher emphasized that nicotine, caffeine and stimulant drugs (such as those that contain caffeine) trigger your adrenal glands to release adrenaline, which is one of the main stress chemicals. These are best avoided. Other foods to avoid include salt and artificial additives, such as preservatives. Choose fresh, unprocessed foods whenever possible. - The researcher discussed with study elder persons the important tips for healthy food preparation by using open discussion and brain storming skills among each other's. **6. Be active physically** -The researcher explained the importance of physical activity in reducing anxiety and stress. Engaging in regular physical activity is one of best activity in reducing anxiety and stress. -The researcher advised the study elder persons to best practice can do twice daily for 15 -30 minutes. - The researcher emphasized on the importance on group exercise which enhance social connections and enjoy practicing exercise together which one of PFA principle of to be connect. -The researcher explained importance of exercises. -The researcher discussed with elder study subjects the pre, during and post exercise principle and precautions. -The researcher explains the following most popular types of exercise for elder persons health: • Walking • Yoga • Chair exercises • Swimming • Aerobics • Cycling

Sessions	Duration	Content
		• Stretching -The researcher used to start every session with breathing and relaxation technique practicing with study elder persons.
Sixth session	60 minutes	**7. Practice cognitive skills:** -The researcher explained the importance of practicing cognitive skills for studied elder persons in reduce anxiety, maintain calmness and eliminate stress. -The researcher discussed one helpful technique that is used frequently in cognitive therapy is self-monitoring. The goals of self-monitoring are to increase your awareness of thoughts and feelings and to identify situations that trigger stress or anxiety through: • Keep a log of the times you feel stressed or anxious by recording the time, situation, and any feelings, thoughts, or emotions you experienced. • Look back on the log to find patterns. -The researcher notified the studied elder persons with another strategy is cognitive restructuring, through: • Practice of looking at negative situations from a different angle. • Cognitive restructuring helps you recognize unhealthy thought patterns like catastrophizing or all-or-nothing thinking. • Adjust your thoughts to become more positive and helpful. • If feel stressed once in a while, engaging in fun and healthy hobbies can help you calm down and take your mind off of your worries. -The researcher asked studied elder persons for seeking support in case they can't control situation. -The researcher mentioned that psychological counseling service and referral is very important of studied elder persons unable to control their situations. -The researcher notified the studied elder persons with psychological counseling service centers, address and time which available in Cairo governorate if any of them needed referral.
Seventh session	60 minutes	**8. Promote sleep hygiene** -The researcher instructed the studied elder persons with importance to promote sleep hygiene. - The researcher mentioned age related changes that affect sleep patterns. - The researcher mentioned tips of sleep hygiene as follows: • Avoid napping • Keep sleep diary • Limit large meals before bed • Relax before bed • Avoid caffeine in the evening • Change your sleeping environment • Exercise • Develop a bedtime routine • Limit electronics before bed • Maintain a comfortable bedroom temperature • Avoid alcohol at night • Avoiding nicotine

Sessions	Duration	Content
		• Don't lie in bed awake • Make the bedroom a sleep zone • Reduce bedroom distractions • Alarm Clock • Avoid exercise before bed • Avoid substances that disrupt sleep • Calm your mind • Manage your light exposure -The researcher summarized the sessions to the studied elder persons. - The researcher opened discussion with studied elder persons to clarify any inquiries or for asking questions

Table (2): Distribution of the studied elder persons according to their socio-demographic data (n= 100)

Demographic data	No	%
Gender		
Female	55	55.0
Male	45	45.0
Age		
60-65 yrs.	17	17.0
66-70 yrs.	35	35.0
Over 70 yrs.	48	48.0
Marital status		
married	65	65.0
widow	28	28.0
divorced	7	7.0
Educational level		
Illiterate	35	35.0
Read and write	18	18.0
Primary level	14	14.0
Secondary level	16	16.0
university and up	17	17.0
Resident place		
At home with his family	58	58.0
At home alone	42	42.0
Current Job		
No	88	88.0
Yes	12	12.0
Income		
Not enough	46	46.0
Enough	54	54.0
Had any current health problems		
No	13	13.0
Yes	87	87.0
Physical condition		
No	72	72.0
Yes	28	28.0
Used earphone		
No	88	88.0
Yes	12	12.0
Present vision problem		
No	58	58.0
Yes	42	42.0
Wear eyeglass		
No	81	81.0
Yes	19	19.0
Present problem in movement		
No	53	53.0
Yes	47	47.0
Used movement aid		
No	79	79.0
Yes	21	21.0

Table (3): Distribution of the studied elder persons according to their Life style (n= 100)

Life style	No	%
Smoking habits		
Nonsmoker	50	50.0
Smoker	33	33.0
Previous smoker	17	17.0
Eat the different fruits and vegetables per day		
No	12	12.0
Yes	88	88.0
Amount of Fluid level per day		
Less than 2liter	36	36.0
From 2-3 L	48	48.0
More than 3 L	16	16.0
Number of meals per day		
Regular 3 meals	18	18.0
More than 3 meals	35	35.0
Less than 2 meals	47	47.0
Drink the Caffeine or tea per day		
No	76	76.0
Yes	24	24.0
Data about Exercise		
Irregular exercises	35	35.0
Regular exercises	5	5.0
Didn't practice any exercises	60	60.0
Number of sleeping hours per day		
Less than 6 hrs.	62	62.0
From 6-8 hrs.	38	38.0
Take enough time for the rest		
No	72	72.0
Yes	28	28.0
Are you take the nap during the day		
No	77	77.0
Yes	23	23.0

Table (4): Distribution of the studied elder persons according to their social and psychological life style (n= 100)

Life style	No	%
Are you able to easy relax and express your feeling		
No	93	93.0
Yes	7	7.0
Can you deal with stress in appropriate way?		
No	88	88.0
Yes	12	12.0
Do you have friends or relatives you can talk about your concern?		
No	81	81.0
Yes	19	19.0
Can you ask them for help?		
No	81	81.0
Yes	19	19.0
Do you have any Hobbies?		
No	83	83.0
Yes	17	17.0

Table (5): Distribution of the studied elder persons according to visual analog scale for anxiety level pre and post intervention (n= 100)

Visual analog scale for anxiety level	Pre		Post	
	No	%	No	%
0-1not all anxious	0	0.0	0	0.0
2-3 mild anxiety level	0	0.0	64	64.0
4-5 moderate anxiety level	7	7.0	36	36.0
6-7 sever anxiety level	46	46.0	0	0.0
8-10 extreme panic anxiety level	47	47.0	0	0.0
MH (p)	**9.370* (<0.001*)**			

MH: Marginal Homogeneity Test
*: Statistically significant at p ≤ 0.05

Table (6): Distribution of the studied the elder persons according to Perceived stress scale pre and post intervention (n= 100)

Perceived stress scale	Pre		Post	
	No	%	No	%
0-13 low level stress	0	0.0	65	65.0
14-26 moderate stress	22	22.0	35	35.0
27-40 high level stress	78	78.0	0	0.0
MH (p)	**9.289* (<0.001*)**			

MH: Marginal Homogeneity Test
*: Statistically significant at p ≤ 0.05

Figure1:


Psychological first aid
CARE
PROTECT
from further threat
COMFORT
SUPPORT
for practical
PROVIDE
information on
coping
CONNECT
with social
supports
EDUCATE
about normal
responses
7 KEY
COMPONENTS