

## MANAGEMENT OF DEATH ANXIETY THROUGH HYPNOSIS IN PRE-SURGICAL PATIENTS

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### **ABSTRACT**

**Objective:** The current study is aimed at exploring the effectiveness of Timeline Therapy under hypnosis in managing death anxiety of pre-surgical patients.

**Design:** Pretest Posttest research design was used for measuring the effectiveness of timeline therapy under hypnosis in managing the death anxiety of pre-surgical patients.

**Place and duration of study:** The study was conducted at different private and public hospitals of Gujranwala and Lahore Punjab, Pakistan, between the time duration of 6 months from April 12<sup>th</sup> 2020- Nov 3<sup>rd</sup> 2020.

**Subjects and Method:** The purposive samples of 20 participants, with the age range of 18 to 60, (Male=10 M= 34.60, SD= 4.551 Female=10; M=38.90; SD=3.315) were taken. Paired sample T-test. Death anxiety scale for pre-surgical patients was used, pre and post self-reporting was taken on the same scale for measuring the effectiveness of timeline therapy.

**Results and Conclusion:** Current study results have showed that timeline therapy under hypnosis is an effective technique in managing death anxiety in pre-surgical patients either of any age, gender, socio-economic status, or family system. The therapy is equally effective for all. This study has wide implications in the field of medical healthcare.

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**Keywords:** Death Anxiety; Timeline Therapy; Hypnosis; Pre-surgical patients.

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## INTRODUCTION

Surgery itself is a very hectic and painful procedure, as it needs physical and emotional consumption of energy by the person (Langs, & Giovacchini, 2018). It is usually seen as stressful and can be demanding too because it requires individual's coping resources. It can become more stressful due to its consequences, anesthesia, hospitalization, and post-operative difficulties (Mavrogiorgou, et al., 2020). It makes the person to keep thinking about the events however, the level of anxiety would be different for every person depending upon the age, gender, socioeconomic status as well as the previous experience of the person related to the surgery. (Menzies & Dar-Nimrod, 2017). Sometimes the patient already had surgery related to that body part or disease. Also, it depends on the doctor how he/she has explained the whole procedure and process of the surgery to the patient. The details related to the surgery would affect the level of anxiety in the patients (Menzies, et al., 2018).

The hospitalization also adds to the stress of the patient as staying in the hospital and looking at the people around coming to the hospital with many diseases, and some would die in front of them. These factors also add to the threat to the patient. The current research took place in Pakistan where people mostly belong to joint family system (Yaakobi, 2015).

“Death anxiety is an anticipated fear in which individual’s mind remains preoccupied with the negative thoughts related to death (Langs & Giovacchini, 2018). Thanatophobia is an omnipresent part of everyone’s life and affects every person in different ways. Not everyone faces the same intensity of death anxiety. The term death anxiety was first coined by Sigmund Freud in 1915, “Freud believed it to be related to one’s unconscious belief in one’s immortality” (Nazari, 2019) “Surgical stress is the systemic response to surgical injury and is characterized by activation of the sympathetic nervous system, endocrine responses as well as immunological and hematological changes (Pandya, & Kathuria, 2021).

Hypnosis is a state of hyper suggestibility where the person’s subconscious mind would be highly active. Hypnosis could be seen as a meditative state, which one can learn to access consciously and deliberately, for a therapeutic purpose (Thompson, et al., 2019).

The subconscious mind consumes the largest portion in which there are all the experiences get stored, all the habits persist here, learning and memory, the trauma, the stressful events, and childhood memories. Then comes the unconscious mind in which all the repressed feelings and emotions

get stored over time. It was generally believed that the hypnosis is a state of sleep and people are taken in the unconscious state of mind and could speak everything they have experienced but in reality, it is a state of deep relaxation in which the subconscious mind becomes active because it has all the experiences of the person. So, by taking the person in that state of mind the anxiety and the conflicts of the patient could be resolved.

Cognitive domains of death anxiety include awareness regarding the possibilities of death. The person could perceive it in the form of images, thoughts related to the death might be watching some television shows and movies related to the death or events anticipated by the person with the concept of death (Januzzi, et al., 2000). When the patient feels anxiety related to the death then it just not remains as thought but it shows some physical symptomatology which includes the rush of the blood towards the surface usually in the skin. A person starts to blush or sometimes it may increase the level of sugar in the blood (Lau & Cheng, 2011).

Pre-surgical patients face not only the physical stressors from the environment, but they have been fighting with their emotional stress as well and that intense feeling of fear would lead the person towards developing death anxiety which lowers the patient's will power and most of them die in the operation theatre. (González-Ramírez, et al., 2017) As it has been observed through research that hypnosis is effective in managing anxiety, so this research aims to study the effects of hypnosis which are effective in lowering the death anxiety in pre-surgical patients.

Timeline therapy is a type of NLP technique in which the person would be taken to the state of anxiousness where the person would feel the most and worse of it. Then the message units will be given to the client. It helps lower the level of negative emotions that are stress-causing and taking the apprehensions to a stable state. The person would be in a deep trance so the instructions given would be understood easily by the person as the critical mind would be blocked at that state. Not just the hypnosis and timeline therapy but the relaxation exercises would also be introduced in the intervention strategies as the body feels relax so it will help the mind to accept the message units to be understood easily (Tacón, et al., 2003).

According to the researches, it has been seen that 68% of the patients feel death anxiety at the time of surgery and some will lose their willpower before the surgery and it would be difficult for the surgeon to handle them. When the patient is under a stressed condition, the patient's response towards the death anxiety is more somatic than emotional, a patient will feel nausea, headache, perspiration and even the patient got faint before undertaking the

surgery So it is the need of the hour to manage the death anxiety for that reason hypnosis has been used as an intervention strategy to manage the death anxiety and save the lives of pre-operative patients. As hypnosis could give better results if the techniques of hypnosis are used altogether with the techniques of NLP, timeline therapy is a technique of NLP and it provides a better output when the patient is in the state of deep trance the message units are better incorporated as the patient is already in a hyper suggestible state of mind (Lau & Cheng, 2011). Timeline therapy is the neuro linguistics programming technique, in this technique time line is elicited in the mind of the patient during the hypnotic state and suggestions is given to break the state of anxiety. Hypnosis helped the patient to relax. When the person would be relaxed it would be easy for him to get into a state of deep trance which is the state of hyper suggestibility.

Suggestibility consisted of many factors, in the hypnosis the preferred representational style of the individual considered as the most significant factor for giving the suggestions. The other is the emotional suggestible these individuals are quieter, talks in low pitch volume. Multiple strategies were remained an active therapy for managing the death anxiety, but hypnosis has not been seen in managing the death anxiety so it is necessary to check the impact of the timeline therapy in managing the death anxiety.

The rational of this study is that Pre-surgical patients face not only the physical stressors from the environment, but they have been fighting with their emotional stress as well and that intense feeling of fear would lead the person towards developing death anxiety which lowers the patient's will power and most of them die in the operation theatre. As it has been observed through research that hypnosis is effective in managing anxiety, this research aims to study the effects of hypnosis which are effective in lowering the death anxiety in pre-surgical patients. To Study the effectiveness of Timeline therapy under hypnosis following hypotheses were formulated

- 1) Time line therapy under Hypnosis would be an effective therapy for managing the psychosomatic symptoms of death anxiety in pre-surgical Patients.
- 2) Timeline therapy under hypnosis would be more effective for female patients with death anxiety in pre-surgical Patients.
- 3) There will be relationship between age and the death anxiety in pre-surgical Patients.

- 4) Timeline therapy under hypnosis would be an effective therapy for uneducated in pre-surgical Patients.
- 5) Timeline therapy would be an effective therapy for unmarried pre-surgical patients.
- 6) Timeline therapy would be an effective therapy for managing the death anxiety of in pre-surgical Patients belonging to the joint family system.

## **METHOD**

### ***Participants***

A nonprobability purposive sampling technique was used in this study. Participants were selected according to the inclusion criteria set for the current research. The purposive samples of 20 participants, with the age range of 18 to 60, (Male=10; M= 34.60, SD= 4.55; Female=10 M=38.90. SD=3.31) were selected from different hospitals of Gujranwala and Lahore, Pakistan.

#### **Inclusion Criteria**

Patients who have to undergo surgery in a few days. Major surgery patients were only selected who have been coming to the hospital for more than 1 year. The age range of patients is 18-60.  $M= 34.15$  ( $SD=10.60$ ). (The age groups were divided into three categories (age 18-25 young adulthood, 26-40 middle adulthood, 41-60 late adulthood).

#### **Exclusion criteria**

The patients who were not admitted to the hospital, who has some other mental disorder like depression, schizophrenia, etc. Diabetic and patients' chronic illnesses like AIDS or hepatitis are also excluded from the study. The patients who did not come under the age range of 18-60 were also excluded from the main study.

### ***Measure***

Before the start of the session the participants were given the questionnaires that included demographic form, death anxiety Arabic scale translated version (Abdel-Khalek, et al., 2009), newly developed death anxiety scale for pre-surgical patients.

1) Demographic Sheet

A demographic sheet was prepared to gather general information about the participants. This information comprised of age, gender, family system, marital status, socio-economic status, and education.

2) Arabic scale translated version (Abdel-Khalek, et al., 2009)

The scale used for research purpose is self- developed titled as Death anxiety scale for pre-surgical patients. The scale has a reliability of .82 and the concurrent validity was checked with Arabian translated version of death anxiety scale. The validity value was .81\*. Scale was only used for checking the intensity of death anxiety in pre-surgical patients. The items of the scale are 38 that shows the psychosomatic symptoms of death anxiety. It is a self-report questionnaire to measure the death anxiety in pre-surgical patients.

Intervention Stage

Manual of management of death anxiety through hypnosis

*Death anxiety is a feeling of dread, apprehension, or solicitude when one thinks of the process of dying or ceasing to be. There are different approaches for induction of hypnosis, but this research study is based upon Kappasonian hypnosis. According to Kappasonian hypnosis. (Spanos, et al., 1986) the hypnosis is induced by sending an overload of message units to the mind to block the critical mind, hence activating the fight or flight response, this will, in turn, create the hyper suggestible state and the hypnotic suggestions will be effective in reducing the symptoms.*

Pre-intervention

*The patients were given the death anxiety scale and ask to fill it according to them how much one of the following statements describes their status. After receiving those questionnaires, the main hypnosis session was conducted with them.*

**Procedure**

In the session, firstly the patient was taken into the relaxed state. The researcher has told the patients about the procedure of the session. She briefly explained the anchors which will be given to the patients in the session. The multimedia projector has used to show some images to the patients for taking them into a deep trance state. The participants were psycho educated by the clinical researcher about the impacts of psychological treatment in managing death anxiety.

The participants agreed on focusing on the problems they are confronting. Then the participant was counselled in a way to make an image of all the stressors responsible for the symptoms. The participant was made aware that during the hypnotic session the image of the stressors will be deleted which will, in turn, erase all the issues associated with those stressors from the mind. The suggestibility of each participant was identified through a finger spreading test. In this test, the participant was asked to uphold the palm in front of the eyes, and the clinical researcher instructed to spread the fingers first in a low tone and then in a loud tone respectively. The tone, to which the participant was more responsive, indicated the participant's suggestibility. After determining the suggestibility of the participant, the clinical researcher used deep breathing exercises to relax the participant so that the participant becomes more prone to achieve the hypnotic state. The participant was instructed not to speak during the hypnotic session, rather signal the response to the suggestions by raising the index finger. Also, a blank sheet of paper and a pen was readily provided.

Further, eye fixation technique was used to facilitate the induction of hypnosis. For this purpose, the participant was asked to focus on the central point of a hypnotic picture on the computer desktop as an eye fixation technique for the induction of hypnosis. The participant was also instructed, "Please don't blink your eyes and don't speak, however, if you feel your eyes are tired you can close your eyes". As the participant closed the eyes, it indicated that the state of the subconscious mind (hypnotic state) was being achieved. Then the state was further deepened by the hypnotic deepening techniques i.e. moving the client from the upper floor of the building to the ground floor in imagination. Soon after the induction and deepening of the hypnotic state, Circle Therapy was used.

For this purpose, the participant was instructed to imagine the image of the stressors created earlier in the session and to indicate with the finger when done. Then the participant was instructed, "Please start drawing a circle clockwise and the image is getting dimmer and dimmer as you are drawing the circle". As the participant started drawing the circle it indicated that the image was getting dimmer in the mind of the participant. Then the participant was instructed, "Please keep drawing the circle till the image is completely deleted". This instruction was repeated over and over again. After that, the participant was instructed, "As the image of your stressors is deleted, your issues will be fixed along with the deletion of this image. Stop drawing the circle when the image is completely deleted and raise your index finger to give a signal". As soon as the participant stopped drawing the circle and gave the signal, the clinical researcher suggested opening the eyes at the count of

10. To break the hypnotic state the clinical researcher asked some random questions from the participant for example, “Do you smell biryani?”

*Post-intervention*

After the session has ended the same death anxiety scale has been administered to the patients. The rating on the scale was taken to assess the difference between the pre-rating and the post rating on the scale. This difference is helpful to compare the results between the pre and post rating from the sample. It will show the effectiveness of the intervention on patients.

Further and the most important the ethical considerations were taken for research purpose. It includes permission from Ethical Department Research Committee, permission from the hospitals. Informed consent from the participants, consent to touch the participation if required, maintain the confidentiality of the patient's shared data, right to withdraw during study volunteer participation and fidelity.

## RESULTS

### Testing the Main Hypothesis

**Table 1**  
*Means, Standard Deviations, T, and P Values of Pre-Testing and Post-Testing on DAS (N=20).*

Pair	Paired Differences			95 % of CI		
	M	SD	t	p		
					LL	UL
Pre	97.65	6.20	70.33	.000	94.74	100.55
Post						

*Note. DF=19, p<0.05, M=Mean, SD=Standard Deviation, CI=Confidence Interval, LL=Lower Limit, UL=Upper Limit.*

The results showed a significant difference in pre-tests and post-tests which indicated that the Timeline therapy under hypnosis is effective in reducing the psychosomatic symptoms of death anxiety in pre-surgical patients.

### Testing the Secondary Hypothesis

The following section contains the results of secondary hypotheses determined through the independent sample *t*-test.

**Table 2**

*Means, Standard Deviations, T and P Values of Gender on Post-Test, on DAS (N=20) on DAS..*

Gender	<i>M</i>	<i>SD</i>	<i>t(18)</i>	<i>p</i>	95 % of CI		Cohen'd
					LL	UL	
Male	34.60	4.55					
			2.41	.310	-8.04	.55	1.08
Female	38.90	3.31					

*Note.*  $DF=18$ ,  $p<0.05$ ,  $M$ =Mean,  $SD$ =Standard Deviation,  $CI$ = Confidence Interval,  $LL$ = Lower Limit,  $UL$ =Upper Limit.

The results clearly showed that there is no significant difference in the effectiveness of timeline therapy under hypnosis between different genders for males 34.60(4.55) and for females 38.90(3.31).

**Table 3**

*Pearson Moment Correlation for Age and Death Anxiety (N=20) on DAS*

Factors	Age	Sum of DAS post
Age	—	-.252**
Sum of DAS post	—	
M	34.15	10.609
SD	36.75	4.459

*Note:* DAS: Death Anxiety Scale, M= Mean, SD= Standard deviation, \* $p<.05$ , \*\* $p<01$ \*\*\*,  $p<001$ .

Table shows the correlation between the death anxiety and the age of the pre-surgical patients. The correlation is highly significant showing the

image of negative correlation that means when the age of the patient increases the death anxiety decreases. Based on this correlation it can be deduced that young adults would experience more death anxiety than older adults.

**Table 4**  
*One Way Analysis Of Variance of Four Different Levels of Education (N=20) On DAS*

	Primary (n=1)	Matric (n=3)	Intermediate (n=8)	Graduation (n=8)
Factors	<i>M(SD)</i>	<i>M(SD)</i>	<i>M(SD)</i>	<i>M(SD)</i>
	41.00 (7.81)	36.00 (3.37)	36.25 (4.69)	37.00 (4.45)
(DAS)Post				
F	.334)			
P	(.801)***			

*Note.* Between groups df=3. Within-group DF=16,  $p < 0.05$ ,  $M$ =Mean,  $SD$ =Standard Deviation.

The result has clearly shown the significance of the therapy for primary 41.00(7.81), matric 36.00(3.37), intermediate 36.25(4.69) and the graduation 37.00(4.45) that Timeline Therapy under hypnosis is equally effective in lowering the levels of death anxiety for those who are uneducated as well as for those who are educated as there is no significant difference among various levels of education.

**Table 5**  
*Means, Standard Deviations, t and p values of marital status on post-test of Death Anxiety Scale (N=20).*

	<i>M</i>	<i>SD</i>	<i>t</i>	<i>P</i>	95% of CI		Cohen's d
					LL	UL	
Married	37.00	4.57					
			.300	.768	3.75	5.007	0.135
Unmarried	36.38	4.56					

*Note.*  $df=18$ ,  $p=0.05$ ,  $M$ =Mean,  $SD$ =Standard Deviation,  $CI$ = Confidence Interval,  $LL$ = Lower Limit,  $UL$ =Upper Limit.

The results clearly showed that there is no significant difference in the effectiveness of Timeline therapy under hypnosis between married and the unmarried

**Table 6**  
*Means, Standard Deviations, t and p values of family setup on post-test on Death Anxiety Scale (N=20)*

	M	SD	T	P	95% of CI		Cohen's d
					LL	UL	
Nuclear	35.78	4.65					
Joint	37.55	4.344	-87	.392	-6.00	2.46	0.39

*Note.*  $DF=18$ ,  $p=0.05$ ,  $M$ =Mean,  $SD$ =Standard Deviation,  $CI$ = Confidence Interval,  $LL$ = Lower Limit,  $UL$ =Upper Limit.

The results clearly showed that there is no significant difference in the effectiveness of timeline therapy under hypnosis between the nuclear family system and the joint family system.

## DISCUSSION

The current study has focused on the effectiveness of the timeline therapy in lowering the level of psychosomatic symptoms of death anxiety in pre-surgical patients. Studies had suggested that pre-surgical patients are more prone to develop death anxiety. As the environment is always providing patient triggers. The triggers would lead to a high level of anxiety, repetitive thoughts related to their death (Hoelterhoff, & Chung, 2017).

Depression scale for the clinical population was a scale based on the same scenario in which the symptoms were the same so no rotation has been seen in the data, that why the one-factor solution has been used in that scale too. As such kind of scale deals with the symptomatology of the disorder so no new information has been seen in it, also the sample was too specific so that the picture was homogenous in the current developed indigenous scale of death anxiety in pre-surgical patients. However, the scale has the cronbach's alpha value of .822 which showed that the scale is reliable, and its concurrent validity has been seen with the other death anxiety scale which was the indigenously translated scale. Hence, in the current research, the death anxiety will be managed with timeline therapy under the trance which could give maximum result just by taking the individual in the subconscious mind,

the subconscious mind increases the level of hyper suggestibility of the individual.

Timeline therapy is a type of NLP technique, NLP is abbreviated as neuro-linguistic programming, it is based on the technique that emphasized on giving the signals to the other person in his preferred representational style, if an individual is more likely to attend the message units visually then the therapist should give the message units in the same style.

Hypnosis is defined as a state of deep mental relaxation or a state of sub consciousness with hyper suggestibility. Hypnosis is considered to be a state of human consciousness involving focused attention and where the peripheral awareness is minimized and it will increase the ability of the individual to respond to the outer suggestions provided to him in that state.

The effectiveness has not been reported in the research until now for mental health problems as depression, anxiety disorder, substance abuse, etc. it has been proven through researches that the significance of the NLP is evident in the field of organization and human resource management domains rather than clinical psychology.

NLP worked on the principle of effective communication, the way a person liked to talk the style will be updated accordingly. Firstly, the manual should be followed as it is a structured technique, and the therapist should be approaching the individual by following a certain set structure pattern (Wood, 2006). In the NLP, more focus is to provide the options to the individual, the person who is in the hypnotic state which means the state of hyper suggestibility where the subconscious mind is active.

The indigenously developed death anxiety scale has shown a high correlation with the Translated version scale of death anxiety, which means that the scale is valid too. This developed scale has further been used for providing the treatment to the pre-surgical patients on managing the death anxiety through timeline therapy under hypnosis. This kind of continuous thought bought symptoms like high blood pressure, trembling of hands whenever they were taken to the session room because they started to think that they are taken to the operation theatre (Hiyoshi, et al., 2017).

The research has shown that the patients who are young and belong to younger adulthood faced more death anxiety as in Pakistani culture people become more religious when they reached to late adulthood, they have developed sense of acceptance about death, however this element lacked in young people. To deal with such a situation timeline therapy has seemed to

be a very effective therapeutic intervention for managing the death anxiety in pre-surgical patients. It is less time consuming and the outcome would be evident right after one session. The difference between the death anxiety level before and after the session would be prominent after taking one session. Because the death anxiety in pre-surgical patients could not be delayed it requires to be managed as soon as possible otherwise it will have detrimental effects on the physical and mental health of the patient.

It has been seen through research that the adolescent who have death anxiety they would show more emotional symptoms rather than physical symptoms (Nia, et al., 2016). Emotional response to death anxiety included escape behavior, not coming home keep out of home till late. Those patients remained out with their friends so they might distract their mind from the thought of surgery. However, the physical response to death anxiety would be more prominent in patients who have touched older adulthood (Grabler, et al., 2018).

In the findings of this research, it has been proved that the pre-surgical patients who belonged to middle adulthood have more death anxiety as compared to those who belonged to the late adulthood. Patients who belonged to middle to late adulthood time have more severe somatic symptoms of anxiety as compared to other ones. They claimed to have stress from other reasons as well. They were worried about their children, also the belongingness (Facco, et. al., 2018).

The results have shown a significant difference before and after ratings of the patients on the death anxiety scale. It means that timeline therapy under hypnosis is an effective intervention in lowering the psychosomatic symptoms of death anxiety in pre-surgical patients (Brady, 2015). Results did not show a significant difference for any of the educational level, which means that timeline therapy would be a significant therapy for lowering the levels of death anxiety in patients of any educational level. Previous research has proved that hypnosis is an effective technique for managing anxiety for people belonging to either educated or uneducated background (Bibi & Khalid, 2020). The results have shown that age and death anxieties have a negative correlation between them. As an individual moved to the older ages, they have an acceptance and idea that life is about to end at any point. Older people have already performed all the assigned duties and responsibilities of their age. Results have supported that timeline therapy under hypnosis is an effective therapy for lowering the levels of death anxiety in pre-surgical patients of any age, either of young, middle and older adulthood. The current study results have shown that the timeline therapy under hypnosis is equally effective for both males and females.

Previous researches have proven this argument that hypnosis is effective for both males and females.

### ***Conclusion***

This research was conducted on the patients who were to undergo the surgical procedure. The current study has found that timeline therapy is effective in managing the death anxiety in pre-surgical patients. Different analysis has run to test the effectiveness of the therapy, which showed that timeline therapy under hypnosis is equally effective in managing death anxiety in pre-surgical patients and it didn't get affected by the gender, marital status, family system and education of the patients. Pre and post ratings on the scale had shown that timeline therapy under hypnosis is an effective therapeutic intervention for managing the death anxiety in pre-surgical patients.

### ***Limitations and Recommendations***

This study only includes participants from major cities of Punjab. The patients must be given counselling before going for the surgery. Extensive research in this area should be conducted to explore many factors. Future studies should aim at backward areas of Punjab and other provinces. There is a dire need to create awareness about hypnotherapy among the general population. The current study is conducted on adult patients; further phenomena of death anxiety could be explored with children.

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