# Effect of Preoperative Reassurance on Relieving Anxiety in Patients Undergoing CABG Surgery

Shazia Ashraf, Mansoor Ghani, Sadia Muhammad Ashraf, Razia Sultana

**Abstract**— Patients undergoing CABG Surgery faces anxiety that altimately cursuade worse outcome of the surgery and even leads to death. The present study aimed to assess the effect of preoperative reassurance on relieving anxiety in patients undergoing CABG surgery.

**Methood-** The non probability, purposive sampling technique was used to select the participants. A total of 80 patients were divided randomly into control and interventional group. Interventional group was given pre-operative reassurance while control group do not receive any intervention. Both groups completed the hospital anxiety and depression scale.

**Results-** T-test was applied to compare the effect of preoperative reassurance on relieving anxiety. A p-value of  $\leq 0.05$  was taken as significant. The mean anxiety score of Interventional group was  $6.45\pm3.80$  as compared with control group  $16.32\pm4.14$ . This was found statistically significant as p-value was 0.0001. It was concluded that preoperative reassurance relieves anxiety in patient undergoing CABG surgery.

**Conclusion.**- It was concluded that preoperative reassurance relieves anxiety in patient undergoing CABG surgery. Primary focus of this research is patients' care. While, preparing nursing care plan, nurses should consider these stressors and positive influence of reassurance to promote optimal level of health in patients undergoing CABG surgery.

Index Terms — anxiety, coronary Artery Bypass Graft Surgery, hospital anxiety and depression scale, nursing care plan, reassurance, Stressors,

# ----- **♦** -----

# 1 Introduction

In the world cardiovascular morbidity and mortality are increasing at an alarming rate. In Pakistan, mortality due to coronary artery disease is 12.8 %. Coronary artery bypass surgery (CABG) is an effective way to treat coronary artery disease. CABG is expensive and the most common type of open-heart surgery. It is an option when the blockage cannot be treated by using non-surgical methods. Surgery, either emergent or elective, is a stressing event and anxiety is a common adaptive response to this stress. In discussing the harmful effects of anxiety, emphasis laid on the inauspicious results of surgery. In preoperative phase when a patient experiences pain and distress, alteration in body functions or image, decreased independence,

family and financial concerns, or expected altered lifestyle, anxiety ensues.

Anxiety level of the patient may be negatively or positively influenced by patient's previous surgical experiences, knowledge about surgical procedure and the anticipated outcome. Patient's recovery, patient's satisfaction and quality of life is adversely affected by anxiety. Patient's surgery experiences are different to each other, even if the same patient undergoes many surgeries at different times; his feeling for each surgery will not be the same. Different psychological and physiological factors alter his acquaint-ance; similarly, two different patients cannot respond the same in the same surgical procedure.

The preoperative psychological comfort may improve postoperative prognosis. This can be done by giving information about treatment, encouraging the patients to participate in curative interventions for coping Pre-operative information and instructions play important role in decreasing the anxiety of the patients' before surgery and even in the intra-operative period.

Better outcome of surgical procedures requires surgical competencies as well as the patient's cooperation. Patients can concentrate well if they can control their stress and anxious feelings that must be addressed before surgical procedures. In order to minimize anxiety, the nurse should assess the patient for individual learning needs and provide the required information.

### The Study Objectives was:

• To assess the effect of preoperative reassurance on relieving anxiety among patients who undergo CABG surgery.

# Research Question:

Is pre-operative reassurance helpful to reduce anxiety level of patients undergoing CABG surgery?

# **Hypothesis:**

Anxiety level can be decreased with preoperative reassurance among patients under going CABG surgery.

#### Methodology

#### The Study Setting:

This study was conducted in Punjab Institute of Cardiology, Hospital Lahore.Pakistan.

#### Research Design

Experimental post-test design

#### Sampling Technique:

Non probability, Purposive sampling technique was used.

# Sample size:

Total sample size n=80 patients were collected from the target population of CABG surgery patients

#### **INCLUSION CRITERIA:**

Patients both males and females undergoing CAB surgery for the first time having age group of 35-60 years were included.

#### **EXCLUSION CRITERIA:**

Those who were having emergency CABG surgery, history of CABG of spouse, history of psychiatric disorder or taking alcohol/opiate or anti-anxiety drugs were excluded.

# **Sample Distribution:**

Sample size was 80, two groups were made by using random number table.40 patients were in interventional group receiving structured information about surgery and 40 patients were in control group receiving no intervention.

### Independent Variable:

Pre-operative Reassurance.

# **Dependent Variables:**

Anxiety level

#### **Data Collection Instrument/ Tool:**

Two data collection tools were used in this study. One was for the information of demographic background and the second for measuring anxiety level.

First tool was study proforma for patient's demographics and background information (Annexure II). Patient's demographic characteristics include: Name (optional), contact Number. (Optional), Age, Gender, Education, Marital status, a Number of kids and Employment.

Second tool, adopted for this study is HADS, which is an open access standardized structured item. The Hospital Anxiety and Depression Scale (HADS) (Annexure III) is a 14-items self-reported scale, developed by Zigmond and Snaith (1983) in Likert-format. First 7-items are used for identification of anxiety whereas; remaining 7-items are for identification of depression. Keeping the purpose of study in mind, which is to assess the anxiety of patients undergoing CABG surgery, only first 7- items related to the anxiety assessment were used. The items related to anxiety included: "I feel tense or wound up", "I get a sort of frightening feeling as if something awful were about to happen", "Worrying thoughts go through my mind", "I can sit at ease and feel relaxed", "I get a sort of frightening feeling like 'butterflies' in the stomach", "I feel restless as if I had to be on the move", "I get sudden feelings of panic".

# Collection of dat:a

Administrative permission was obtained and participants were selected and divided into experimental and

control group by using irregular number table. The study purpose was explained to the participants and written informed consent was obtained and interview was conducted to obtain the demographic data. After obtaining demographic data Structured Information about surgical procedure was given to interventional group by the researcher on the same day. Anxiety level was measured by using HADS on admission day for surgery from the both groups. Incomplete responses were considered incorrect.

### Limitation of the study

Owing to financial and time constraints there were certain limitations in this research study. The technique for sampling was nonprobability and in particular purposive sampling. The study was confined to one hospital; therefore, findings may not be generalized. In disparity, the results of this study provide support to the existing studies so generalization may be done to some extent. Furthermore, large sample size could have a broader depiction of the effect of reassurance.

#### Results and discussion:

Mean anxiety score was observed low in interventional group as compared to control group. This difference was statistically significant as P- value was < 0.0001.

#### Comparison of mean Anxiety Score between Groups:

Patient's Group.	Mean <u>+</u> S D	P- value
Interventional Group	6.45 ± 3.80	
Control Group	16.32 <u>+</u> 4.14	0.0001
Total	11.38 <u>+</u> 6.34	

Similarly, in another study patients in the intervention group participents received preoperative education/training by specially trained nurses. Anxiety levels were measured on admission-A, and before surgery-B. A statistically significant difference in anxiety mean scores between intervention (19.48  $\pm$  2.03) and control groups  $(43.27 \pm 5.49)$ , p < .001 was found. An intervention with individualised information and emotional support before coronary artery bypass grafting was evaluated in an randomized control trial. This intervention of ~30 minutes was based on a supportive psychotherapy model and was delivered by trained nurses. Significantly reduced anxiety was found in the intervention group patients (13.18  $\pm$  2.03) compared to control patients (31.27  $\pm$  6.28), before coronary artery bypass grafting. Study results are giving answer to the research question. Reassurance helped the patients in interventional group to reduce their anxiety level thus they had low mean anxiety score as compared to control group.

Majority of the studies reasoned out stress and anxiety from the CABG surgery, Mostly the patients experience anxiety due to insufficient information, inadequate respect, deprivation of psychological support and less understanding regarding surgical procedure and management. Patients might distrust health care providers ascribed to aggravated anxiety. Though, latest technology and advanced methods are enacted to treat the cardiac patients, yet kindred stress and anxiety are not appropriately addressed. Here a nursing care plan and comprehensive approach is needed to decrease the complications of anxiety. Preoperative provision of information and health education have been remarkably helpful in reduction of anxiety levels which lead to better outcomes and satisfaction levels ultimately affecting attitude and quality of life. This study is evinced that in interventional group mean anxiety score was low.

#### 4 CONCLUSION

Study results supported the hypothesis that anxiety level can be decreased with reassurance. Lack of psychological support and knowledge renders anxiety before surgery to the patients undergoing CABG surgery and it can be addressed well with reassurance. Study results provide evidence that reassurance is found to be helpful to reduce anxiety among patients who undergo CABG surgery. Preoperative nursing care is an exigent area of expertise, therefore assessing preoperative anxiety among patients undergoing CABG surgery is a prime responsibility of the health care professionals to provide adequate information about the operation,

to provide a friendly environment and good quality care.

It is imperative to control preoperative anxiety and avoid unwanted postoperative outcomes. Nurses who are involved in preoperative care units must be qualified and capable to develop methods to assess preoperative anxiety and to develop appropriate anxiety reduction interventions to serve critical role of reassurance and improve patients' postoperative outcomes. Precisely, health professionals and nurses can put in place more effective and apt interventions in the wake of identification of anxiety among patients before CABG surgery.

### The Implication for nursing practice:

Keeping in view study result and discussions following suggestions can be taken into account to improve patient's care, satisfaction, and an evidence- based practice.

- 1. The study replication will increase the generalization and trustworthiness of the evidence.
- 2. When dealing with patient's nurses play the various important role of a teacher counsellor, a caregiver, and an investigator. This study will provide an opportunity to promote the optimal level of health and confidence of patient's by using reassurance as a cost-effective intervention
- 3. Nurse administrators can effectively utilize this evi-
- Auther Name is Shazia Asharf is working as vice principal at Multan college of Nursin, MMDC Multan, Pakistan PH-+923346943744. E-mail: crnashaz@gmail.com
- Co-Author name is Dr Mansoor Ghani currently working as head of department at institute of Nursing, in University of Health Sciences, Lahore, Pakistan, PH-+923334775907.
   E-mail: mansoorgw@gmail.com
- Sadia Muhammad Ashraf is psychologist at preston university Islamabad.Pakistan. PH- +923326455944 E-mail: <a href="mailto:saadmuhamad@gmail.com">saadmuhamad@gmail.com</a>
- Razia Sultana is lecturer at Madina teaching university, Fasalabad, Pakistan. PH-+923334167064 E-mail raziasultanabashirahmad@gmail.com

dence in organizing, delivering and evaluating patient's

care and can eliminate dissatisfaction in most efficient manner.

4. Nurse educator and policymakers can structure the program of study in developing course contents and designing new methods of teaching to train the nurses in order to improve nursing practice and delivery of better service. Periodic educational seminars, refresher courses, workshops discussions, case studies can help nurses who are in service. Apart from this certificate programs may be started to keep nurses knowledge updated.

# References

- [1] Ahmad, S., 2019. Is Pakistan ready for 'Enhanced Recovery After Surgery' (ERAS)?. Anaesthesia, Pain & Intensive Care, pp.4-5.
- [2] Ali, A., Masih, S., Rasheed, A. and Naz, S., 2019. ANX-IETY AMONG PRE-OPERATIVE PATIENTS WAIT-ING FOR CORONARY ARTERY BYPASS GRAFTING (CABG). Pakistan Heart Journal, 52(1).
- [3] Alhurani, A.S., Dekker, R.L., Abed, M.A., Khalil, A., Al Zaghal, M.H., Lee, K.S., Mudd-Martin, G., Biddle, M.J., Lennie, T.A. and Moser, D.K., 2015. The association of co-morbid symptoms of depression and anxiety with all-cause mortality and cardiac rehospitalization in patients with heart failure.

  Psychosomatics, 56(4), pp.371-380.
- [4] Arakelian E, Nyholm L, Öster C. How Anesthesiologists and Nurse Anesthetists Assess and Handle Patients' Perioperative Worries Without a Validated Instrument. Journal of PeriAnesthesia Nursing. 2019 Feb 7.
- [5] Arora, R.C., Brown IV, C.H., Sanjanwala, R.M. and McKelvie, R., 2018. "NEW" prehabilitation: a 3-way approach to improve postoperative survival and health-related quality of life in cardiac surgery patients. *Canadian Journal of Cardiology*, 34(7), pp.839-849.
- [6] Asadi, M., Asadzandi, M. and Ebadi, A., 2014. Effects of spiritual care based on Ghalb Salim nursing model in reducing anxiety of patients undergoing CABG surgery. *Iran J Crit Care Nurs*, 7(3), pp.142-51.

- [7] Assari, S., MoghaniLankarani, M., Caldwell, C. H., & Zimmerman, M. (2015). Anxiety Symptoms During Adolescence Predicts Salivary Cortisol in Early Adulthood Among Blacks; Sex differences. International Journal of Endocrinology and Metabolism, 13(4), e18041.
- [16] Curcio, N., Philpot, L., Bennett, M., Felius, J., Powers, M.B., Edgerton, J. and Warren, A.M., 2019. Anxiety, depression, an healthcare utilization 1 year after cardiac surgery. *The American Journal of Surgery*, 218(2), pp.335-341.
- [8] Athwal, R., Dakka, M., Appleton, D., Harries, S., Clarke, D. and Jones, L., 2015. Patients' perspective on day case breast surgery. *Breast Care*, 10(1), pp.39-43.
- [9] Bedaso, A. and Ayalew, M., 2019. Preoperative anxiety among adult patients undergoing elective surgery: a prospective survey at a general hospital in Ethiopia. *Patient safety in surgery*, 13(1), p.18.
- [10] Bell, J., Paul, S., Sesti, J. and Granger, B., 2019. Improving Self-Reported Preoperative Anxiety Through a Preoperative Education Program: A Quality Improvement Project. *Journal of Doctoral Nursing Practice*, 12(1), pp.117-124.
- [11] Bergström, A., Håkansson, Å., Stomberg, M.W. andBjerså, K., 2018. Comfort theory in practice—Nurse anesthetists' comfort measures and interventions in a preoperative context. *Journal of PeriAnesthesia Nursing*, 33(2), pp.162-171.
- [12] Bergvik, S., Sørlie, T. and Wynn, R., 2010. Approach and avoidance coping and regulatory focus in patients having coronary artery bypass graft surgery. *Journal of Health Psychology*, 15(6), pp.915-924.
- [13] Celano, C.M., Millstein, R.A., Bedoya, C.A., Healy, B.C., Roest, A.M. and Huffman, J.C., 2015. Association between anxiety and mortality in patients with coronary artery disease: A meta-analysis. *American heart journal*, 170(6), pp.1105-1115.
- [14] Chandrababu, R., Kurup, S.B., Ravishankar, N. and Ramesh, J., 2019. Effect of pranayama on anxiety and pain among patients undergoing cardiac surgery: A nonrandomized controlled trial. *Clinical Epidemiology* and Global Health.
- [15] Cserep Z, Losoncz E, Balog P, Szili-Torok T, Husz A, Juhasz B, et al.(2012) The impact of preoperative anxiety and education level on long-term mortality after cardiac surgery. J Card Surg;7(1):86.

