

EXPLORING THE EMOTIONS AND CHALLENGES ENCOUNTERED BY PATIENTS BEFORE CABG SURGERY

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ABSTRACT

Background: One such cardiac procedure is Coronary Artery Bypass Grafting (CABG), and patients may experience extreme emotional responses to this procedure before surgery. These usual feelings of anxiety, fear, uncertainty, and sadness could influence preoperative preparedness and the postoperative outcomes. Although of clinical significance, the psychological events and experiences occurring in patients before CABG are not fully investigated in the domestic medical environment.

Aim: This study aimed to explore the emotional responses and challenges experienced by patients before undergoing CABG surgery in selected hospitals in Peshawar.

Methods: A quantitative cross-sectional design was used. The data were gathered among 106 patients due to receive CABG in five large hospitals during four months (September-December 2023). The questionnaire, consisting of seven blocks (each consisting of some Likert points and multiple-choice options) was created to assess the demographic data, medical history, emotional states, communication, challenges, coping strategies, and expectations and has been validated. To analyse the data, descriptive statistics (frequency, percentage, mean, and standard deviations) were applied.

Results: Findings indicated that mild to moderate anxiety and uncertainty were the most common emotions among participants. Challenges such as understanding the procedure, arranging home care, managing emotional stress, and financial concerns were reported as moderately to severely difficult by many respondents. Communication with healthcare providers was largely perceived as manageable, while limited emotional and psychological support emerged as a concern.

Conclusion: Preoperative CABG patients experience significant emotional and logistical challenges. Addressing these concerns through patient-centered education, psychological support, and discharge planning may improve surgical outcomes.

Keywords: CABG, patient emotions, preoperative anxiety, cardiac surgery, healthcare communication, emotional stress, patient challenges.

INTRODUCTION

Coronary artery bypass grafting (CABG) refers to a typical and life-saving surgery that aims to normalize blood circulation into the heart since it bypasses obstructed or constricted coronary arteries (Mir et al., 2023). The key terms that should be referred to in

this research paper are CABG surgery, which denotes the set of operations that involves the use of the grafts of other body parts to redirect blood flow around the blocked arteries (Cheng et al., 2021); preoperative emotions, which should be described as

the variety of psychology-related responses evoked in patients prior to the day of the operation; and psychosocial difficulties, which are defined as the mental and emotional and social difficulties that emerge during the preoperative time (Ramezani et al., 2022). It is incomprehensible to commit to the preoperative experience in cardiac care without a clear comprehension of these terms.

Ischemic heart disease is the top cause of CABG and its global burden has been continuously growing; therefore, CABG surgery is among the most frequently conducted procedures of the world (Korkmaz, 2021). CHDs (commonly referred to as cardiovascular diseases) kill around 17.9 million people every year as indicated by the World Health Organization, and more than 370,000 CABG operations are conducted per annum in countries such as the United States. In South Asia, an increase in urbanization, life style change and poor access to early treatment have created a boom in the number of CABG cases. This increasing incidence highlights the necessity to know more than the surgery part of care and move to consider the psychological health of patients pending CABG (Yumul, 2025).

To most patients, the time before CABG operation is a highly emotional experience (Yumul, 2025). They are filled with anxiety, fear of death, depression, doubts of the success of the surgical procedure, and fear of recovery after the surgery. All these feelings are not only momentary, they may affect the result of surgery, or time in recovering, and general quality of life. Research has revealed that patients with extensive preop anxiety tend to report adverse outcomes, such as post hereditary complications, suffering and extended hospitalization (Ali, 2023).

Thus the issue of emotional readiness is one of the key factors of integral cardiac care (Ebrahimi et al., 2025). Besides experience of psychological distress, there are other numerous practical and social difficulties ahead of patients prior to CABG. The stressors often cited are financial issues regarding the expense of the surgery, possibility of losing the job, the need to be reliant of family members and interference with the daily routines. Preoperative distress is also worsened by the fear of permanently losing some autonomy or being disabled. A high percentage of patients are also challenged by spiritual or existential issues, and they tend to reexamine their priorities in life and search deeper meanings in it at this pivotal moment (Ebrahimi et al., 2025).

The perception and reactions of patients to the CABG surgery may be affected by the factors of

gender, ages, cultural background, and the level of health literacy (Gill et al., 2023). As an example, older patients would be more stoic or denial-oriented, and younger ones would be scared of losing a source of income or family duties. Women tend to express emotional issues more than men, who can in many cases internalize emotional distress and are at risk of poor reporting on psychological distress. Moreover, rural patients, or less educated people have fewer opportunities to have a consultation and can go under the scalpel still being motivated by trifling concerns and misunderstandings (van den Houdt et al., 2024).

More broadly, in the patient-centered care setting, patient-centered care providers are not just being empathetic by learning the emotional and social aspects of preoperative experience but are also being evidence-based and out-come-based (Mir et al., 2023). Many cardiac care recommendations currently recommend preoperative psychological evaluation and even incorporate counseling or teaching intervention. Nevertheless, there is still lack of supportive resources as seen in most low- and middle-income countries which makes patients ill-equipped psychologically to cope with a significant change in their lives such as CABG (Cheng et al., 2021).

This research aimed to investigate the lived emotional experiences and the difficulties experienced by the patients waiting CABG surgery. The qualitative study of these dimensions aims to identify the pattern, stressors, and coping mechanisms used by these patients. Finally, the results can inform medical professionals and help them develop custom-made perioperative preparation programs that should not only support the physical condition of cardiac patients but also their emotional state. There is a better way to approach cardiac surgery holistically to enhance outcome, decrease anxiety and enhance long-term recovery.

Methodology

It was a quantitative cross-sectional study, carried out in five primary hospitals of Peshawar, which involved a four months period, September to December 2023. This research paper was to determine the emotional issues facing patients prior to their surgery of a coronary bypass graft (CABG). To make the selection, a convenient sampling methodology was adopted whereby 106 patients were simply selected to meet the inclusion criteria.

Data Collection Procedure

The research was carried out in a pre-validated questionnaire that was acquired with consent of authors of original study and the respective ethical committees. The participants were well informed of the objective of the study before they were provided with the questionnaire. Both verbal and written informed consent were obtained. The distribution of the questionnaire was made to the patients when they were in a stable condition of physical and psychological status during the preoperative period of their stay in the hospital. The researchers ensured the privacy and the confidence when collecting the data and provide support in filling in the forms when necessary.

Data Analysis Procedure

Upon collection of the data, the answers were coded and inserted into the statistical package of the social sciences (SPSS) 25. Frequencies, percentages, means and standard deviations were computed as descriptive statistics to characterize demographic variables and the indicators of emotion.

Ethical Considerations

The Institutional Ethics Committee of Khyber Medical University Peshawar and the Buner College of Nursing & health sciences were used to seek their ethical approval. Besides, it ensured that it had the approval of Ethical Review Boards of all the participating hospitals. In the study, participant confidentiality, anonymity and voluntary participation were observed to the latter. There were no identifiers and the participants were reminded that the process was voluntary and they could opt out at any given point without affecting their medical needs

Results and Analysis

Demographic Characteristics

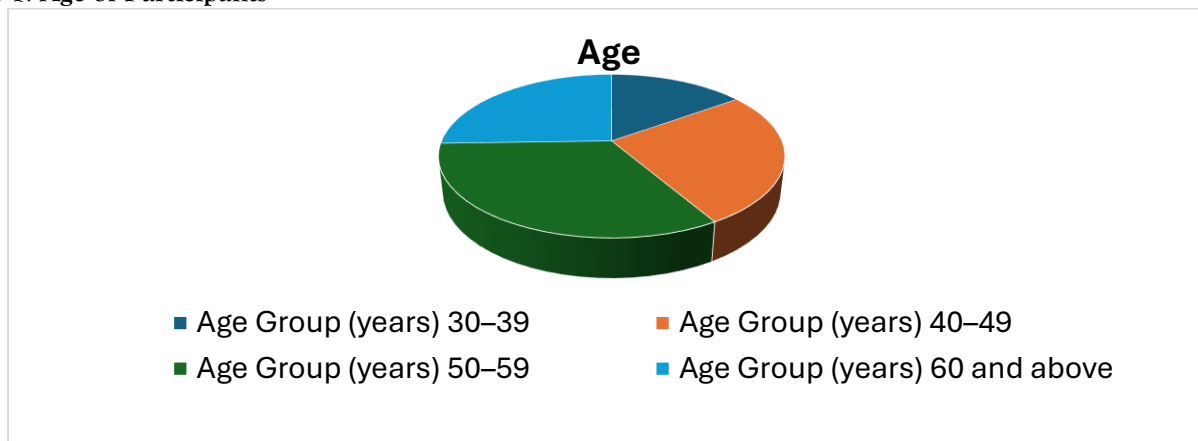
The study involved 106 participants, with a slightly higher proportion of males (54.7%) than females (45.3%). Most participants were aged between 50 and 59 years (33%) and had no formal education (36.8%). A large majority were married (84.9%), and nearly half were unemployed or retired (46.2%). Educational attainment and employment varied, indicating diverse backgrounds among the patients [Table 1].

Table 1: Demographic Characteristics of the Participants (n = 106)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	58	54.7%
	Female	48	45.3%
Age Group (years)	30-39	16	15.1%
	40-49	28	26.4%
	50-59	35	33.0%
	60 and above	27	25.5%
Educational Level	No formal education	39	36.8%
	Primary to Matric	32	30.2%
	Intermediate/High School	21	19.8%
	Bachelor's degree or higher	14	13.2%
Marital Status	Married	90	84.9%
	Unmarried/Widowed/Other	16	15.1%
Occupation	Employed	24	22.6%
	Unemployed/Retired	49	46.2%
	Self-employed/Farmer	33	31.1%

The majority of participants were aged between 50-59 years (35), followed by those aged 40-49 years (28). Fewer participants were in the 30-39 (16) and 60 and above (27) age groups [Figure 1].

Figure 1: Age of Participants



The intensity of feelings

The majority of participants experienced moderate to mild levels of anxiety (42.4%), fear (65%), and uncertainty (60.3%), with very few reporting severe or extreme emotions. Hope and optimism were commonly reported at moderate levels (59.4% and

53.7%, respectively), indicating emotional resilience. Helplessness, anger, denial, and sadness were mostly mild, though some participants expressed moderate levels. Severe emotional responses were rare across all categories, suggesting a balanced emotional state in most patients [Table 2].

	Not at all		Mild		Moderate		Severe		Extreme	
Anxiety	37	34.9%	45	42.4%	15	14.1%	6	5.6%	3	2.8%
Fear	69	65%	19	17.9%	11	10.3%	3	2.8%	4	3.7%
Uncertainty	36	33.9%	64	60.3%	2	1.8%	3	2.8%	1	0.9%
Hope	5	4.7%	19	17.9%	63	59.4%	9	8.4%	10	9.4%
Optimism	5	4.7%	9	8.4%	57	53.7%	33	31.1%	2	1.8%
Helplessness	13	12.2%	56	52.8%	26	24.5%	9	8.4%	2	1.8%
Anger	20	18.8%	53	50%	31	29.2%	2	1.8%	0	0%
Denial	27	25.4%	51	48.1%	24	22.6%	3	2.8%	1	0.9%
Sadness	18	16.9%	48	45.2%	26	24.5%	13	12.2%	1	0.9%

Table 2: The intensity of feelings

Preoperative Challenges Faced by Patients Undergoing CABG Surgery

Most participants found communicating with healthcare teams (50.9%) and understanding the CABG procedure (36.7%) not challenging. However, arranging for home care and making lifestyle changes posed moderate to severe challenges for a significant

portion (38.6% and 21.6% respectively). Managing emotional stress was somewhat challenging for many (36.7%), while obtaining financial assistance was a notable challenge for over 59%. These results reflect varying degrees of difficulty in both emotional and practical aspects of pre-surgery preparation [Table 3].

Table: Preoperative Challenges Faced by Patients Undergoing CABG Surgery

Challenge	Not Challenging at all	Somewhat Challenging	Moderately Challenging	Severely Challenging	Extremely Challenging
Understanding the CABG procedure	39 (36.7%)	21 (19.8%)	16 (15.0%)	17 (16.0%)	13 (12.2%)
Communicating with healthcare team	54 (50.9%)	22 (20.7%)	13 (12.2%)	11 (10.3%)	6 (5.6%)
Managing emotional stress and anxiety	35 (33.0%)	39 (36.7%)	19 (17.9%)	7 (6.6%)	6 (5.6%)
Obtaining financial assistance	7 (6.6%)	63 (59.4%)	31 (29.2%)	3 (2.8%)	2 (1.9%)
Arranging for home care post-surgery	9 (8.4%)	14 (13.2%)	41 (38.6%)	29 (27.3%)	13 (12.2%)
Making lifestyle changes	14 (13.2%)	39 (36.7%)	23 (21.6%)	19 (17.9%)	11 (10.3%)

Discussion

The aim of the study was an investigation of patient emotional experiences, the problems he/she faces before being submitted to coronary artery bypass graft (CABG) surgery. According to the findings, anxiety, fear, and uncertainty turned out to be widespread emotional reactions of patients, whereas hope and optimism were still there but more moderate. Such emotional responses are expected in people awaiting a significant operation, and they are particularly common in responding to the uncertainty of the results of the risky cardiac operations (Gill et al., 2023). Before the operation, the period is characterized by psychological susceptibility as a person awaits complications, stays in a hospital, or is forced to alter his or her lifestyle (van den Houdt et al., 2024).

The anxiety was reported at different scales in which more than 40 percent of the respondents had mild anxiety levels and over 20 percent had moderate and severe anxiety levels. When compared to prior research, it corresponds to the findings that preoperative anxiety remains a predominant phenomenon among patients with cardiac conditions which also frequently impacts their process of recovery (Leonardsen et al., 2024). It is possible to attribute existence of anxiety to fear of death, anxiety over anesthesia and pain after surgery. However, the level of overall anxiety was moderate in the current study where the participants did not show particularly high levels of anxiety, unlike in the other studies that observed very high rates of anxiety among patients with a history of psychiatric conditions (Sivakumar, 2021).

Regarding communication, over half of the participants mentioned that it was not much of a problem to communicate with healthcare providers. This difference is contrary to the results observed in earlier studies in less-resourced environments where poor communication was a significant stressor (Gough et al., 2021). The occurrence of trained personnel and organized preoperative counseling in the tertiary care hospitals in the urban setting might be a cause of the better responses in this region. Nevertheless, a substantial percentage of patients reported that they also experienced difficulties in comprehending the very procedure of CABG which indicates that no matter what verbal exchange takes place, there is still no mutual understanding (Shi et al., 2021).

Most of the participants raised the issue of post-operative care preparation. Arranging home care and

lifestyle change, such as quitting smoking or healthier changes in diets were found to be difficult to a moderately and severely difficult level. This implies that discharge education and follow up care is needed on a continuous basis so that recovery can be smooth (Hussain & Dioso, 2025). The significance of having put together support systems, specifically after an operation in the form of home visits as well as education programs headed by nurses, which are frequently absent in most healthcare settings, has also been noted in studies conducted on other settings (Leonardsen et al., 2024).

Feeling of psychological support was also lacking by patients due to the emotional stress caused by it. The participants said that even though they were supposed to remain well emotionally, they had no tools or means of addressing stress. The identified gap in care can also be indicative of a larger problem in the field of cardiac care because the needs of the patient in terms of psychology are frequently sidelined and not addressed compared to clinical necessities (Gill et al., 2023). The inclusion of mental health care into preoperative planning might promote patient resilience and outcomes (van den Houdt et al., 2024).

Finances were not severe among the majority of participants in any way, but it was actually an obstacle to a part of them. A large part of the respondents reported that they somewhat or moderately struggled to get financial aid in their procedure. This is an indication to the influence of economic factors to access quality and timely surgical care. Together with emotional demands and logistical difficulties, financial stress may have a considerable impact on the readiness of a patient and his/her mental readiness to undergo a surgical procedure (Sivakumar, 2021).

Conclusion

To sum up, the study results prove the conclusion that CABG surgery patients experience a complex of emotion, information, logistic, and financial problems before the operation. Although it seems that certain aspects of the patients care, like the communication with the staff, are not such problems in this sample, some need specific interventions, primarily psychological support and post-discharge support. The given findings indicate the need to implement comprehensive preoperative care interventions supporting both the physical and emotional preparation of heart patients. It can be added that future studies must compare how well

multidisciplinary pre-surgical program fare regarding the enhancement of patient well-being and post-surgical survival.

Recommendations

At the end of this study, it is recommended that further studies should be performed on the same topic at different institutions. It is highly recommended to conduct similar studies at high scales in both male and female genders at equal numbers, to get more evidence regarding feelings, emotions and challenges encountered by patients before CABG surgery. By equipping nurses with a deeper understanding of patients' unique emotional challenges, we can develop more comprehensive and personalized approaches to patient care. This, in turn, can enhance patient well-being, reduce anxiety and fear, and ultimately contribute to better recovery outcomes.

Limitations

Alhamdulillah! Our research was successful but there were some hardships that we faced while conducting our study. The most important issue was the lack of relevant literature on the same topic. There are very few studies that have been conducted in Pakistan. Another issue we faced during our study was a large sample size i.e. 106 participants which took more time to analyze our data and organize it.

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