



Review Article

Need of Assessment of the Quality of Life in Patients after Coronary Artery Bypass Grafting

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Abstract

Among the non-communicable disease burden which is on rise globally; cardiovascular diseases attribute to the major cause of mortality and morbidity worldwide. The management of coronary artery disease may be tackled by non-invasive or invasive techniques such as coronary artery bypass grafting (CABG). In spite of advances in operative techniques of CABG; the care in the rehabilitation phase holds vital importance. Quality of life (QoL) after CABG needs to promote by equal efforts of the health-care team along with initiatives of the patients when he returns home from the hospital setting. Nurses' participation in the secondary prevention of complications in the post-CABG period definitely enhances the QoL of the patients.

Key words: Coronary artery bypass grafting surgery, Nursing, Prevalence CAD

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Introduction

As per the Global Status Report, the low- and middle-income countries bear nearly 80% of the burden of diseases such as cardiovascular diseases, diabetes, cancer, and chronic respiratory diseases. Cardiovascular diseases are one of the leading causes of morbidity and mortality. These cause 17 million deaths all over the world and contribute to 48% of deaths due to non-communicable diseases. The chronic conditions seem to develop slowly but a noteworthy change has been observed in lifestyles and behaviors that are occurring with a stunning speed. The coronary heart diseases are majorly attributed to the behavioral risk factors also called as modifiable risk factors such as physical inactivity, unhealthy diet, and use of tobacco.^[1]

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Indian Burden

The estimated mortality in India due to coronary heart diseases was 1.6 million (2000); showing an approximate burden of 32 million patients.^[2] The disease shows a burden of coronary artery disease (CAD) in both the rural and urban areas with the prevalence of 3–5% and 7–10%, respectively.^[3] The prevalence of CAD is seen at younger ages and a high incidence of multiple vessel disease, especially the double-vessel disease (DVD) and triple-vessel disease (TVD).^[4]

Management of CAD

Coronary artery bypass grafting (CABG) surgery is not only for prolonging the life of patients but also it is important for improving the quality of life (QoL) of heart patients. The prevalence of CAD is seen at younger ages and a high incidence of multiple vessel disease, especially the DVD and TVD.^[4] In case of acute events of CAD, diagnostic measures are intensified in the golden hour to improve the therapeutic outcomes of the event. The patients undergo cardiac catheterization, percutaneous coronary intervention (PCI), or CABG. Despite increase in non-invasive treatments like as PCI, CABG may be required in patients with TVD, severe left main stem artery stenosis, or left main equivalent disease, particularly when left ventricular function is compromised. In this procedure, the occluded coronary artery is bypassed using the patient's

own blood vessel, that is, either a saphenous vein or internal mammary artery. The surgeries are done using a heart lung machine traditionally. With the advances in surgery, minimally invasive bypass surgery is used which has minimized the use of heart-lung machine. Thus, off-pump surgeries are on rise.^[5]

Care after CABG Surgery

Post-CABG rehabilitation of the patients is of utmost importance. There may be readmissions after the discharge of the patients in case of the development of any complications such as infection of the deep sternal wound, heart failure, or arrhythmias. Patient safety and quality measures are an important aspect during the recovery from the surgery.^[6,7] Cardiac rehabilitation involves not only physical aspects but also interventions on the physical, psychological, and social conditions. This may have a positive effect on the health and health-related QoL (HRQoL). A multidisciplinary approach remains the current challenge in providing the care in rehabilitation phase.

QoL after CABG Surgery

QoL is a subjective perception and differs from person to person. There may be differences in the patients and the health-care providers.^[8] Various questionnaires have been used such as World Health Organization QoL Brief and RAND-36 Health Survey that assess QoL in physical, psychological, social relationship, and environmental domains or dimensions. These measure the HRQoL and the interventions taken in the direction help in reduction of the number of cardiac events, enhanced support of the family, and an increase in their physical and leisure activity. These, in turn, aid in improvement of patients' self-confidence and psychological stability.^[9]

Role of Nurses

Nurses play an important role in improvement in patient's well-being after the CABG surgery. The role of the nurse encompasses as being not only a counselor or a coach but also an excellent educator.^[10] Studies conducted on various interventions by the nurses have demonstrated an improvement in QoL of the CABG patients. Bsharat and Karadag in a study on 80 patients with CABG in control as well as intervention groups in which planned educational program was used for the intervention group using a booklet and DVD showed a significant increase in QoL indicators on SF-36 Health Survey.^[11] A few other studies have used interventions as educational booklets or behavioral interventions to improve outcomes of cardiac rehabilitation, especially after CABG surgery.^[12,13]

Conclusion

Cardiac rehabilitation programs need to be strengthened for the post-CABG patients. Nurses participation need to be improved, especially in India in intensive discharge

education protocols. They can assess their individual needs and bridge the areas of health education in this period, and thus, patients will be assisted to lead to better QoL after CABG.

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Conflict of interest

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