

Quality of life of patients revascularized by angioplasty in a public cardiology hospital in Recife

RESUMO | Objetivo: Avaliar a qualidade de vida dos pacientes submetidos a revascularização por Angioplastia. Métodos: Trata-se de um estudo descritivo, transversal, quantitativo, realizado nos meses de março a abril de 2019 com 25 pacientes de um hospital público de referência em cardiologia de Recife (PE). Foi utilizado o questionário WHOQOL-Bref para avaliação da qualidade de vida. Resultados: Verificou-se que 56% (n: 14) da amostra são do gênero masculino e tinham uma mediana de idade de 63 anos. A avaliação da qualidade de vida dos pacientes apresentou resultado moderado, com necessidade de melhora em todos os domínios. O domínio "físico" obteve o escore mais baixo ($3,20 \pm 1,08$), enquanto o domínio relações pessoais obteve o melhor índice ($3,71 \pm 1,08$). A média do escore total foi de 3,38 (DP: 1,11). Conclusão: Os resultados refletiram um grau moderado de qualidade de vida e sua melhora depende do processo de mudança comportamental do indivíduo.

Palavras-chaves: Doença das Coronárias; Enfermagem; Qualidade de Vida.

ABSTRACT | Objective: To evaluate the quality of life of patients undergoing revascularization by angioplasty. Methods: This is a descriptive, cross-sectional, quantitative study conducted in the months of March to April 2019 with 25 patients from a public cardiology referral hospital in Recife (PE). The WHOQOL-Bref questionnaire was used to assess quality of life. Results: It was found that 56% (n: 14) of the sample were male, with a median age of 63 years. The patients' quality of life assessment showed moderate results, with need for improvement in all domains. The physical domain had the lowest score (3.20 ± 1.08), while the personal relationships domain had the best score (3.71 ± 1.08). The mean total score was 3.38 (SD: 1.11). Conclusion: The results reflected a moderate degree of quality of life and its improvement depends on the individual's behavioral change process.

Keywords: Coronary Disease; Nursing; Quality of life.

RESUMEN | Objetivo: Evaluar la calidad de vida de los pacientes sometidos a revascularización mediante angioplastia. Métodos: Se trata de un estudio descriptivo, transversal y cuantitativo realizado en los meses de marzo a abril de 2019 con 25 pacientes de un hospital público de referencia en cardiología de Recife (PE). Se utilizó el cuestionario WHOQOL-Bref para evaluar la calidad de vida. Resultados: Se encontró que el 56% (n: 14) de la muestra eran hombres y tenían una edad media de 63 años. La evaluación de la calidad de vida de los pacientes mostró un resultado moderado, con necesidad de mejora en todos los dominios. El dominio "físico" obtuvo la puntuación más baja ($3,20 \pm 1,08$), mientras que el dominio relaciones personales obtuvo el mejor índice ($3,71 \pm 1,08$). La puntuación total media fue de 3,38 (DE: 1,11). Conclusión: Los resultados reflejaron un grado moderado de calidad de vida y su mejora depende del proceso de cambio de conducta del individuo.

Palabras claves: Enfermedad de las coronarias; Enfermería; Calidad de vida.

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INTRODUCTION

Cardiovascular diseases are one of the main causes of disease and death in the world, the most common being coronary artery disease (CAD), which represents the narrowing or obstruction of the coronary arteries as a result of atherosclerosis, whose most serious complication is myocardial infarction. ⁽¹⁾

In Brazil, this complication has contributed to 20 million deaths annually, with an estimate for more than 24 million in 2030. ⁽²⁾ Several studies have shown that although Brazilians' life expectancy has grown in the last ten years, on the other hand, there was a much higher rate of cardiovascular diseases. ⁽³⁾

Risk factors for these diseases are dyslipi-

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demia, hypertension and diabetes mellitus, associated with lifestyle habits such as diet, sedentary lifestyle, smoking, age and sex, as fundamental risk factors. ⁽¹⁾ These factors have an important influence on cardiovascular risk, which is why their assessment, treatment and observation are emphasized in clinical care, research and treatment guidelines. ⁽¹⁾

The increase in life expectancy, the improvements in basic health conditions, as well as the admirable advances in medicine in recent years, still make cardiology face countless patients undergoing cardiac surgery. ⁽⁴⁾

In 2011, in Brazil, approximately 100 thousand cardiac surgeries were performed, these aimed at the return of the patient's physical, mental and social well-being and more than 50% of these surgeries were myocardial revascularization (MRS), one of the most common in the treatment of heart disease. ^(5,6)

CABG is an important surgical procedure for patients with CAD, as it improves symptoms, survival and quality of life (QL) of these patients. However, unfortunately, the quality of life of these individuals after the surgical procedure does not improve in all domains, and some patients still have a worse health-related quality of life after surgery. ⁽⁷⁾

After CABG, patients often report pain, discomfort, feeling depressed, lack of patience, loss of general well-being, and inability to function at the same level as before the procedure. These feelings can seriously compromise the patient's quality of life. ⁽⁸⁾

In this perspective, this study was based on the following guiding question: What is the quality of life level of patients undergoing revascularization by angioplasty? Based on this question, this research aimed to evaluate the quality of life of patients undergoing revascularization by angioplasty in a cardiology hospital in Recife - PE.

METHODS

This is a descriptive, exploratory, cross-sectional and quantitative study, carried out



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in the post-revascularized outpatient clinic of a public reference hospital in Recife - PE / Hospital Agamenon Magalhães (HAM).

The study population consisted of all patients in the postoperative period of revascularization, treated at the Hospital's outpatient clinic in the period corresponding to data collection (March to April 2019), making a total sample of 25 participants. Patients with companions, at the HAM outpatient clinic, aged 18 years or over and who had undergone CABG were included. Patients with neurological deficits or health problems that made data collection unfeasible were excluded.

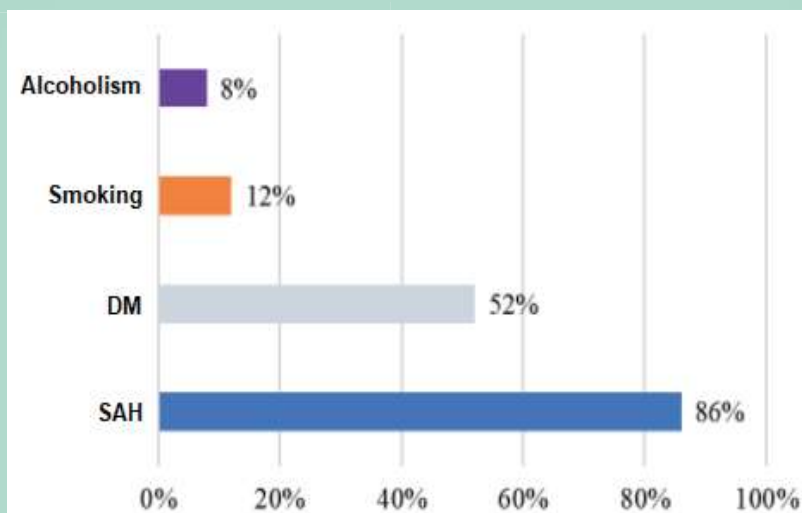
The collection process took place from three distinct stages: at first, the objective of the study was explained to the participants by reading the Informed Consent Form (ICF) and later signing; in the second, data referring to the socio-demographic and clinical profile were collected and, in the third moment, questions related to QOL were raised, through a face-to-face interview conducted in a confidential environment.

For the analysis of QoL in patients, a validated instrument was used - the World Health Organization Quality of Life - Bref (WHO-QOL-Bref). This is a questionnaire with objective questions about QoL in the physical, psychological, social relationships and environment domains. This questionnaire consists of 26 questions, where the first refers to quality of life in general and the second to satisfaction with one's own health. The other 24 are divided into the aforementioned domains, being an instrument that can be used both for healthy populations and for populations affected by health problems and chronic diseases. In addition to its cross-cultural character, the WHOQOL instrument values the individual's individual perception, being able to assess quality of life in different groups and situations. ⁽⁹⁾

Data were descriptively and statistically analyzed using the Statistical Package for Social Sciences (SPSS) version 23.0.

The research was approved by the Ethics and Research Committee of the Catholic University of Pernambuco under number CAAE 007950 18.5.0000.5206 (opinion:

Figure 1: Risk factors for coronary heart disease, Recife (PE), Brazil, 2019.



Source: Research data

Tabela 1: Distribuição da avaliação da qualidade de vida geral, Recife (PE), Brasil, 2019.

QoL self-assessment	N	%
Intensity		
Very bad	01	4%
Average	11	44%
Good	09	36%
Very good	04	16%
Health satisfaction		
Intensity		
Very bad	08	32%
Bad	01	4%
Neither bad nor good	03	12%
Good	06	24%
Very good	07	28%

Source: Research data

Tabela 2: Distribuição da média e desvio padrão da avaliação da QV por domínios, Recife (PE), Brasil, 2019.

Domain	Mean ± SD	Coefficient of variation	Amplitude
Physicist	3,20 ± 1,08	0,34	4
Psychological	3,53 ± 1,22	0,35	4
Personal relationships	3,71 ± 1,08	0,29	4
Environment	3,31 ± 0,94	0,28	4
Quality of life self-assessment	3,36 ± 1,35	0,40	4
Total	3,38 ± 1,11	0,33	4

Source: Research data

deals with research involving human beings.

RESULTS

Of the 25 patients interviewed, the mean age was 63 years and the median was 61 years. It was found that 56% (n: 14) of the sample are male, 76% (n: 19) are married, 28% (n: 07) are retired and 56% (n: 14) defined Catholicism as their practicing religion.

When analyzing the clinical conditions of patients, Figure 1 shows the frequency of patients with risk factors for coronary heart disease, where there is a greater distribution of systemic arterial hypertension (SAH) (86%) and diabetes mellitus (DM) (52%).

Table 1 shows the results of the assessment of the patients' general quality of life, by level of intensity, where 44% of the individuals classified their QoL as median and 32% indicated that their satisfaction with their health is very poor.

Table 2 shows the assessment of QoL by WHOQOL-Bref domains. The "personal relationships" domain had the best result in QOL (3,71 ± 1,08), while the "physical" domain had the lowest average (3,20 ± 1,08). It appears that in general, the mean of the domains was relatively low (3,38 ± 1,11).

DISCUSSION

This study evaluates the quality of life in post CABG patients in a reference hospital in cardiology in Recife. As for the sociodemographic profile of the analyzed patients, it was found that they have a similar age to other studies that evaluated the quality of life in patients with heart disease. (10,11)

Regarding gender, more than half of the sample is from the male population, and in this context, researchers claim that the prevalence of surgical treatment in patients with heart disease occurs in males, (10) this is because this population is more resistant in seeking health services, especially in primary care, and men are generally at greater risk for coronary artery disease. (12,13)

When analyzing the main cardio-

vascular risk factors present in the participants of this study, it appears that systemic arterial hypertension was the most prevalent. Similar results can be found in a cross-sectional study carried out in Fortaleza (CE), where 83,3% of patients who underwent CABG had SAH and 46,2% had DM. (14) A similar study carried out in Porto Alegre - RS identified the same pattern of risk factors for CAD in the patients analyzed, whose results were 86,2% for SAH and 36,2% for DM. (15)

Hypertension has been an important risk factor for heart disease due to oxidative and mechanical stress. It is noteworthy that hypertension and smoking were responsible for the highest number of deaths in a 2009 review comparing twelve modifiable risk factors. (16) However, only 54% of these patients achieve adequate blood pressure control. (17)

This can be a major factor in influencing the QoL of patients with heart disease, since a new scenario of elementary changes in lifestyle associated with the diagnosis of the disease, can cause the loss of body silence and the memory of the pathology as a mortality factor. (18)

Regarding QoL, the present study demonstrates that in a population of patients with heart disease undergoing coronary artery bypass graft surgery, there was a median improvement in postoperative quality of life. The evaluation of this QoL through the WHOQOL-Bref instrument brings results regarding the physical, psychological, personal relationships and environment domains.

The domain of personal relationships had the highest score, similar to other studies. (4,10) Personal and social relationships can help improve the QoL of revascularized patients, as they can relieve stress in crisis situations, inhibit the development of other diseases and play an essential role in the recovery of diseases already present in patients, being considered as a protection factor,



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thus constituting an important focus of intervention with this specific population. (19)

CABG is not only a life extension, but also an improvement in functional mobility, quality of life and maintenance of independent status, indicating that patients have benefited significantly from the surgery. It is possible that the improvement in quality of life is due to the reduction of anxiety, fear and distrust present before the surgical procedure, positively modifying the patient's expectations regarding their future health. (20)

On the other hand, the "physical aspect domain" had the worst QoL score. This domain mainly assesses daily activities and may have influenced the research participants' age and comorbidities. It should be noted that heart failure is associated with a worsening in the performance of daily activities, decreased ability to establish social relationships and loss of independence. (21)

It is noteworthy, therefore, that myocardial revascularization surgery is not just to prolong the life of patients, it is important to improve the quality of life of cardiac patients. Therefore, it is important to evaluate the preoperative conditions of cardiac surgery patients to obtain results that can be compared with postoperative quality of life results. (20, 22)

The applicability of the results of this research are subsidies for the health professional, especially the nursing team, to implement actions associated with health education, aiming at the adherence of revascularized patients both to the treatment offered and to the prevention of new events that may culminate in more serious outcomes.

CONCLUSION

It was found that in patients undergoing CABG there was a moderate improvement in quality of life, with

emphasis on the domain of personal relationships. The physical aspect and environment domains had the lowest scores on the scale used, probably due to the patients' advanced age and the

present comorbidities.

Issues involving the QoL of revascularized patients can help health professionals involved in rehabilitation planning, guiding these patients in relation

to self-care, healthy eating, changing lifestyle habits, practicing physical exercise, avoiding smoking and alcoholism, among other measures. 🐦

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