INTEGRATIVE REVIEW

The daily life of adults and elderly after myocardial revascularization

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Objective: To describe the evidences on care needs and factors those influence the daily life of patients after myocardial revascularization surgery. Method: An integrative review of literature, with data collection at the database Latin American and Caribbean Literature in Health Sciences and Medical Literature Analysis and Retrieval System Online using the keywords “myocardial revascularization” and “patient discharge” or “everyday activities” or “rehabilitation” or “social adjustment” in January 2013. There were analyzed 12 articles those constituted the corpus of the study. Results: The results indicate that the day-to-day after surgery includes the need for changes in lifestyle. The negative repercussions of myocardial revascularization include anxiety, depression and medical monitoring and the positive factors decrease the frequency of anginal symptoms. Conclusion: It was concluded that there is a lack of assistance from nursing professionals who contribute to the quality of life of revascularized patients by encouraging autonomy in the reconstruction of identity. Descriptors: Nursing, Myocardial revascularization, Cardiology, Patient discharge, Activities of daily living.

RESUMO

Objetivo: Descrever as evidências sobre as necessidades de cuidado e fatores que influenciam no cotidiano dos pacientes apóis a cirurgia de revascularização miocárdica. Método: Revisão integrativa da literatura, com coleta dos dados nas bases Literatura Latina-Americana e do Caribe em Ciências da Saúde e Medical Literature Analysis and Retrieval System Online utilizando os descritores “revascularização miocárdica” and “alta do paciente” or “atividades cotidianas” or “reabilitação” or “ajustamento social”, em janeiro de 2013. Foram analisados 12 artigos que constituíram o corpus do estudo. Resultados: Os resultados apontam que o dia-a-dia após cirurgia inclui necessidade de mudanças no estilo de vida. As repercussões negativas da revascularização miocárdica incluem ansiedade, depressão e acompanhamento médico e os fatores positivos a diminuição dos sintomas anginosos. Conclusão: Conclui-se que há carência de intervenções dos profissionais de enfermagem que contribuam na qualidade de vida dos indivíduos revascularizados, incentivando a autonomia na reconstrução da identidade. Descriptors: Enfermagem, revascularização miocárdica, Cardiologia, Alta do paciente, Atividades cotidianas.

RESUMEN

Objetivo: Describir las evidencias sobre las necesidades de atención y los factores que influyen en la vida diaria de los pacientes después de la cirugía de revascularización miocárdica. Método: Revisión integrada de la literatura, con la recopilación de datos en las bases de Literatura Latina Americana y del Caribe en Ciencias de la Salud y Medical Literature Analysis and Retrieval System Online utilizando las palabras clave “revascularización miocárdica” y “descarga del paciente” o “actividades cotidianas” o “rehabilitación” o “ajuste social” en enero de 2013. Se analizaron 12 artículos que constituyeron el corpus del estudio. Resultados: Los resultados indican que el día a día después de la cirugía incluye la necesidad de cambios en el estilo de vida. Los efectos negativos de la revascularización miocárdica son la ansiedad, la depresión y la vigilancia médica y los factores positivos son la disminución de los síntomas anginosos. Conclusión: Se concluye que existe una falta de asistencia de los profesionales de enfermería que contribuyan a la calidad de vida de los pacientes revascularizados mediante el fomento de la autonomía en la reconstrucción de la identidad. Descriptores: Enfermería, Revascularización Miocárdica, Cardiología, Dispensa Médica, Actividades Cotidianas.

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INTRODUCTION

Cardiovascular diseases are the leading causes of death in Brazil, and in 2010 the ischemic heart diseases were responsible for 52,4 deaths per 100,000 inhabitants. The cardiac pathologies affecting so increasing the population of working age and contribute to the loss of healthy years of life and economic productivity.

Among cardiovascular diseases, ischemic heart disease includes cases of unstable angina and acute myocardial infarction, and characterized by symptoms of acute myocardial ischemia that vary according to the degree of narrowing of the arterial lumen, thrombus formation and obstruction blood flow to the myocardium.

The treatment of ischemic diseases involves high technology and requires in some cases, conducting surgeries myocardial revascularization (CRM-in Portuguese). In this surgical procedure, a blood vessel from another part of the body is grafted onto the occluded vessel, so that the flow of the myocardium is reestablished. The primary goal of CRM is to improve the quality of life of those operated by decreasing the symptoms of ischemic disease, which basically involves chest pain and dyspnoea. Besides enabling the increase in life expectancy and restore the possibility of developing physical activity.

Among cardiac surgeries performed in Brazil by the Brazilian Unified Health System (SUS) the CRM is the most frequent. It was estimated that in 2011 were held 11,402 CRM, which resulted in an expense of R$ 86,886.47 for public safes. The success of this surgery is a result of the training of professionals and the development of new drugs. Furthermore, the realization of CRM will certainly increase in the coming years due to the improvement of the population's access to health services, accelerating the aging population and the consequent increase in the incidence of cardiovascular diseases.

The individual revascularized undergoes a break from the daily flow of activities previously performed by it and its behavior after revascularization becomes predominant in health restoration and maintenance of life. Thus, one realizes the importance of nurses take heed to the way people who experienced myocardial revascularization give continuity to his life after the procedure in order to facilitate the patient's adaptation to his new routine within the limits imposed by CRM.

Therefore, we have as the objective of the study describe the evidence from the literature on care needs and factors that influence the daily lives of adults and elderly patients undergoing CRM, after hospital discharge.
METHOD

This is an integrative literature review. This research method allows the synthesis of multiple published studies and provides general conclusions about a particular area of study.11

In this study we carried out the six steps of the integrative review.11 At first, there was the issue of the identification and preparation of the research question. During the second step succeeded the establishment of criteria for inclusion and exclusion of articles. In the third step were defined information to be extracted using a validated instrument12, which includes data related to referral, intervention studied, findings, recommendations and conclusions. At this stage, too, was the categorization of levels of evidence of the articles by the classification proposed by Melnyk and Fineout-Overholt.13

This classification has seven levels of evidence. At level one, the evidence comes from a systematic review or meta-analysis of randomized controlled trials or derived from clinical guidelines based on systematic reviews of randomized controlled trials, two level, evidence derived from at least one randomized controlled trial well delineated; level three, evidence of well-designed clinical trials without randomization, four level, evidence from cohort and case-control well delineated, level five evidence originating systematic review of descriptive and qualitative studies; six level, evidence derived from a single descriptive or qualitative study, seven level, evidence from opinion of authorities and/or report of expert committees obtained. It is worth noting that the levels of evidence for each article in the corpus of the research were evaluated by three researchers.

Was developed following the fourth step, which deals with the evaluation of the included studies. In the fifth step was conducted to interpret the results and finally, in the sixth phase, we developed the synthesis of knowledge evidenced in articles.

To guide the study was formulated the following research question: What are the needs of care and factors those influence the daily lives of adults and elderly patients undergoing coronary artery bypass grafting after discharge? The search was developed in the Virtual Health Library, in databases Latin American and Caribbean Health Sciences Literature (LILACS) and Medical Literature Analysis and Retrieval System Online (MEDLINE), using the descriptors “myocardic revascularization” and “patient discharge” or “daily activities” or “rehabilitation” or “social adjustment ” and the languages in “SPANISH” or “ENGLISH” or “PORTUGUESE.

The search of the studies took place in January 2013. To select them, the inclusion criteria were: research articles available free online in full published until December 2012, in English, Portuguese or Spanish. And as exclusion criteria: articles without abstracts or those who had incomplete in the database and review articles. Thus, in this way, the quest to find possible 58 productions, of which 12 met the criteria that formed the corpus of the analysis (Figure 1).
RESULTS AND DISCUSSION

In this integrative review were analyzed 12 articles that met the established criteria. As the year of publication, it was found that ranged from 1998 to 2012, with emphasis on the year 2009, which featured three articles. Referring to the design, ten of the articles had a quantitative approach, since qualitative approaches and qualitative and quantitative accounted for one each. The level of evidence pointed to a grade six, which had seven articles were descriptive.

For the countries of research development, Brazil stood out with five studies, followed by the United States that held three and Greece, Switzerland, Spain and Canada with one article each. Referring to the areas of knowledge, nursing stands out with six, with five publications medicine and physical therapy to a study.
The daily life of adults...

Table 1-list of review articles according to authors, year of publication, area of concentration, delineation, level of evidence and origin.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Year of Publication</th>
<th>Area of Concentration</th>
<th>Delineation</th>
<th>Level of evidence</th>
<th>Country of study</th>
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<tbody>
<tr>
<td>Mansano NG, Vila VSC, Rossi LA.</td>
<td>2009</td>
<td>Nursing</td>
<td>Qualitative</td>
<td>6</td>
<td>Brazil</td>
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<tr>
<td>Rodrigues GRS, Cruz EA.</td>
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<td>Nursing</td>
<td>Qualitative-quantitative</td>
<td>6</td>
<td>Brazil</td>
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<tr>
<td>Gonçalves FDP, Marinho PEM, Maciel MA, Galindo PVC, Dornelas AA.</td>
<td>2006</td>
<td>Physiotherapy</td>
<td>Quantitative</td>
<td>6</td>
<td>Brazil</td>
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<tr>
<td>Lima FE, Araujo, TL.</td>
<td>2005</td>
<td>Nursing</td>
<td>Quantitative</td>
<td>6</td>
<td>Brazil</td>
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<tr>
<td>McGillion M, Arthur HM, Cook A,</td>
<td>2012</td>
<td>Medicine</td>
<td>Quantitative</td>
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<td>Carroll SL, Victor JC, Lallier PL,</td>
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<td>et al.</td>
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<td>Buser MA, Buser PT, Kuster GM,</td>
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<td>Quantitative</td>
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<td>Grize L, Pfisterer M.</td>
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<tr>
<td>Lima FE, de Araujo TL.</td>
<td>2007</td>
<td>Nursing</td>
<td>Quantitative</td>
<td>6</td>
<td>Brazil</td>
</tr>
<tr>
<td>Moser DK, Dracup K.</td>
<td>2004</td>
<td>Nursing</td>
<td>Quantitative</td>
<td>6</td>
<td>United States</td>
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<tr>
<td>Seto TB, Taira DA, Berezin R,</td>
<td>2000</td>
<td>Medicine</td>
<td>Quantitative</td>
<td>2</td>
<td>United States</td>
</tr>
<tr>
<td>Chauhan MS, Cutlip DE, Ho KK, et al.</td>
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<tr>
<td>Rowe MA, King KB.</td>
<td>1998</td>
<td>Nursing</td>
<td>Quantitative</td>
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Care needs after myocardial revascularization

The rehabilitation process after surgery requires the individual to maintain healthy habits, make use of prescribed medications, among other cares. The need for change in lifestyle after surgery was found in the articles analyzed as a factor that has positive and negative aspects in the life of the individual revascularized. Surgery is a milestone that means a possibility of revival of the patient, which appears as an opportunity to make all the different habits that are harmful to health prior to the development of heart disease. From the moment in which individuals experience a situation that puts them at risk of death, it is acceptable that after the new “lease of life” offered by the CRM, to manifest the desire of behavioral change and changes in living standards.

On the other hand, the need for change in eating habits that heart requires, especially in the sense of assuming the limitations and adopt changes in lifestyle, is seen as something negative and uncomfortable, where desires are repressed and people divided between the will and the ban. This may discourage the patient to adhere to treatment and then no need of educational work.

Another factor that alters the daily life of individuals after CRM is the modification of household income, which is evidenced in the literature with positive and negative aspects. Some patients after CRM showed better living conditions, which allowed the return to work. The recovery of the ability to develop work activities prior to heart disease, contributes to the improvement in household income and thus in improved self-esteem.

In other cases the need away from work, medicine expenses and offset lead to financial dependency of the patient, as well as contribute to the family income decreased.
Often, the limitations imposed by the CRM can make patients feel undervalued and dissatisfied due to changes in the perception of their role within the family, professional and social.27

The socio-economic problems such as unemployment, disability retirement and reliance on family care due to the limitations imposed by poor health, are appointed by the patients as a significant quality of life, since the act of working is the condition of having health.28

There are also those patients who are the source of financial resources of the family and see the CRM as a guarantee that after this surgery you can resume daily activities performed before the illness and continue to promote the material welfare of the family.28

It is noted that the significant improvement in physical and mental aspects of individuals after surgery favors the expressive return to work but is not always enough improvement for the patient to resume their work activities with the same intensity. Thus, patients present with dissatisfaction with work experience as restrictions to return to their activities after CRM, which is reflected in low self-esteem.28

Factors that negatively influence the daily life after CRM

Among the factors that negatively influence how individuals give continuity to his life after surgery is the psychological state.23-24,25 The most common manifestations are anxiety and depression.29

The fact that undergoes major surgery such as heart surgery, by itself contributes to anxiety. This happens mainly because the heart is popularly related to feelings, in addition to reporting the thoughts of life and death.30 The hospital discharge after cardiac surgery can cause anxiety in the patient and his family due to the emergence of doubts to take care that were previously performed by the health team.31

In this sense, the nursing through individualized consultations, before and after performing heart surgery, can be an ally in minimizing psychological changes after CRM. Study using protocol nursing consultations with systematic assessments for anxiety and depression, found that people monitored regularly had lower percentage of anxiety and depression after six months follow-up.29 The accompanying nursing, too, can be an outpatient basis prior to CRM, because when psychological issues are noted early, you can prevent the onset severe psychological disorders, who require pharmacological intervention.32

The psycho-emotional impact on individuals who underwent CRM, are often associated with limitations in work activities, which can lead to low self-esteem and feelings of individuals’ uselessness.9 anxiety also can trigger physical and clinical effects in patients, because the more anxious the patients get after surgery, the higher the levels of postoperative pain and hospital stay.33 Thus, pain and chest discomfort regarding wound generators are difficulty in movement and require assistance to perform some activities, leading to loss of individual autonomy.

Understands pain as a subjective experience, complex and personal, that only the individual can feel describe it.34 Despite the advancement of analgesic drugs and non-pharmacological techniques for pain relief, it is still considered a major problem in the
postoperative period.\textsuperscript{35} It is in this context that nursing has an important role in guiding high for these individuals and follow-up after discharge, guiding strategies for minimizing pain as sleeping position, care when coughing and walking, as well as the correct use of prescription painkillers as.

It was evident that the need for ongoing medical monitoring and medications\textsuperscript{14,22} are factors that negatively influence the daily lives of individuals in post CABG, especially with issues of difficulty of access and treatment costs. In study\textsuperscript{16} aimed to assess and identify factors related to adherence to drug treatment in elderly outpatients most subjects reported that there is a lack of medicines in the Basic Health is known that this fact may compromise adherence to treatment, as that many individuals do not have a financial position to purchase the drug or move up to the hospital to conduct a proper medical monitoring.

Adherence to treatment of chronic disease requires continuous monitoring by a multidisciplinary team, which can help patients gain access to health services. The poor economic conditions of patients who underwent CRM also interfere with drug therapy. This reveals the need for government investment in strategies to facilitate effective treatment after surgery for low income patients.

Another important factor shown to be influential in the patients' life was the loss of libido\textsuperscript{22} coupled with marital problems, which do not lead to resumption of sexual activity after surgery. Often, the patient recovering from cardiac diseases not resume sexual activity because of lack of clarification and fear of pain during the act. In addition, the guidelines offered by health professionals on this subject are scarce and elusive, as many professionals consider it intimate and difficult to approach.\textsuperscript{37-38}

With the lack of approach by the professionals on the resumption of sexual activity after revascularization, the individual remains dubious about it. Thus need to find your own physical limits to perform sexual activities and also, these questions can lead you to abolish the practice of their sexual routine.

Quality of life is directly related to meeting the needs, wants and desires of individuals, such as sexuality, which requires subjective assessment.\textsuperscript{39} The outpatient treatment can allow a space for debate on the subject in order to provide guidance on sexual activity and thus improve the quality of sexual life of patients after CRM.

Factors that positively influence the daily life after CRM

Among the factors that influence the daily lives of people after CRM, the articles analyzed showed that the decrease in anginal symptoms reflected in the quality of life\textsuperscript{14-15,16,18-19,20-21,22,24}. In perception of revascularized patients, have quality of life is to have a peaceful and happy life with well-being, satisfaction, health, family harmony and employment.\textsuperscript{40}

The decrease of anginal symptoms is desired by the individual undergoing CRM, because the surgical procedure offers a significant improvement in quality of life when compared to patients treated medically or with coronary angioplasty.\textsuperscript{41} In view of the reduction of the symptoms that CRM provides revascularized, there is an improvement in living with the disease severity and chronic care needs that it imposes.\textsuperscript{42}
Study revealed that cardiac surgery promoted tolerance to physical exercise for patients operated because they were able to increase the distance that roamed walking. Thus, the number of physically active people can grow in the post CRM, since they do not feel tired easily.43

Clinical improvement and quality of life of patients need to be considered in the context of a multidisciplinary continuous monitoring.44 It is necessary to ensure that patients, after discharge, receiving information about the care that should be in your home, adapting them to their physical limits.31

Further evidence of the positive factors in the daily revascularized patients14,17,23, is family support, which is important in the recovery from surgery and support for the development of individualized care. People undergoing CRM consider family important to maintain your quality of life.40

The illness of a family member affects all members and relationships, for example, occurs when the acute myocardial infarction in a family member, there is a change in the organization and functioning of the family and unite members who were removed by emotional support offered to any family member who needs.45

The family helps in dealing with problems related to health and illness and also the social problems that involve the daily lives of individuals who underwent CRM.40 The completion of this surgery is one of the essential aspects for the rehab to the presence of the family. Patients who underwent CRM appreciate the presence of family, wanting to do things we have not done in life and aspire to a closer relationship with their children.26

Study reveals that among the family members, a spouse is a major source of support for patients revascularized, being considered an indicator of social support for recovery after surgery, once the companion provides psychological support and encouragement, bringing the individual’s self-esteem after CRM. The family may facilitate treatment adherence through social support, emotional and financial support of revascularized.46

The family can help us care required during the postoperative period of CRM. The professional to know the feelings that permeate discharge of patients revascularized, like insecurity to perform care in residence can offer guidance to the individual’s family during hospitalization. This information should cover basic content about how to act after discharge and may be offered through educational folders, aimed at facilitating the daily life at home and encourage recovery after CRM.31

It is essential to enter the family in monitoring the revascularized patients, since they also need information and support to deal with the changes caused by the manifestation of a cardiomyopathy in a family member. Health professionals need to play their roles as educators, considering both the physical and emotional changes of individuals who underwent CABG and their families. They will have to learn to live with the disease and its limitations, thus you can set goals that encourage effort and continuity of care.31,46
CONCLUSION

The evidences from literature review points to the need for changes in the lifestyle of the person after CRM. Identified that health professionals have concrete elements that can assist in the daily lives of these people.

Care needs after surgery include evidence about the use of medications and healthy habits. The daily life of these people suffered financial changes according to the abandonment or resumption of work professionally.

The factors that negatively influence the daily after CRM include mental status changes such as anxiety, depression and loss of libido. However, the decrease of anginal symptoms has been identified as a positive after surgery, which provides well being and reflects better quality of life.

Family support is important in the recovery process, considering that the situation of illness affects all family members. Thus, it is emphasized that the nursing through the activities of health education, can provide moments of talk about the need for maintenance care in the period after hospital discharge.

In this review it was noted that although many articles have been analyzed nursing, few interventions have brought these professionals with the revascularized patients in order to assist them in the process of post-surgical rehabilitation.

It is understood that with this evidence you can see where it can shortages of professional intervention to contribute to the pursuit of quality of life of individuals revascularized, either guidelines or even the emotional support needed in the rehabilitation phase, encouraging the pursuit of autonomy and reconstruction of their identity after this event that is impacting the CRM.

REFERENCES