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Investigating Relationship between the Self-Efficacy and Self- Care in Patients Undergoing CABG Surgery of Hospitals in Kerman

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Abstract	**Original Research Article**

Background*:* Coronary artery bypass grafting (CABG) surgery is a surgical procedure associated with one of the highest rates of transfusion. ***Objectives****:* The purpose of this study was to Investigating the relationship between the self-efficacy and self- care in patients undergoing CABG surgery. ***Materials and Methods:*** This study included 100 patients undergoing coronary artery bypass grafting. A descriptive, correlation, co relational design was used. Statistic population of research concludes patients CABG referring to the Clinic doctor's located in kerman, Iran in 2014. The patients answered the same questionnaire including demographic, self-efficacy, self-care. Data analysis included descriptive statistics, pearson's r correlations, regression analysis, ANOVA analyses and SPSS software (package of Spss / pc + + ver16). ***Results:*** The results showed that index means self care and self-efficacy are respectively 77($\pm$14) and 59 ($\pm$14). According the results, there is relatively high level of self care in the patients'. There is significant relationship between demographic and self-care. As self-care rates declined with increasing age and level of self care was highest in men. The results showed that with increasing levels of Education was increased self-efficacy in patients'. ***Conclusion:*** The results showed that To increase self-care in CABG patients, nurses can increase with proper training, self-efficacy and as a result of quality of life chances.
Keywords: Self-efficacy, self- care, Coronary Artery Bypass Graft (CABG), Kerman.

INTRODUCTION

Cardiovascular diseases are among the most common cause of humans' death [1]. According to the world health report in 2008, heart diseases are the cause of 12.8% of world deaths, and annually it causes death for about 3.8 million men and 3.4 million women [3]. Many complications of Ischemic heart diseases are due to reduction in coronary blood flow. The initial aim of treatment is good blood flow into the myocardium; CABG is a common method for the vascular treatment and it includes more complications and death in compare with Medical therapy and percutaneous interventions and it is a lifesaving technique in some cases [4] and its amount is increasing every year [5]. Surgery is along with several psychological complications [6]; since it's a threat to life, it endangers health and can cause some psychological reactions such as anxiety [7]. Patients undergoing heart surgery experience a large crisis in their life and since there is a direct relationship between heart and death and life, patients have extensive psychological and emotional reactions towards surgery and waiting for heart surgery is the cause of a big tension which leads to patients' anxiety and stress [8].

Objective

This study aimed to investigating relationship between self-efficacy and self-care in patients undergoing cabg surgery of hospitals in kerman.

MATERIALS AND METHODS

A comparative study was conducted on 100 CABG patients Adescriptive, correlation, co relational design was used. Statistic population of research concludes patientscoronary artery bypass graft surgery (CABG) referring to the doctor's cliniclocated in kerman, Iranin 2014. The population consist of 100 patients. The patients answered the same questionnaire including demographic, self-efficacy(including 17 items) self-care(including 20 items). Data analysis included descriptive statistics, Pearson's r Correlations, regression analysis, ANOVA analyses and SPSS software (package ofSpss / pc + + ver16).

Ethical Considerations

Permission for this study was through the ethics committee of kmu. Other ethical issues in this study involved the assurance of confidentiality and anonymity of the participants. All participants were informed about the purpose and design of this research, and that their participation was voluntary. Participants signed a written informed consent for their participation.

Data analysis

Data analysis was performed using the SPSS v.20 software. Descriptive statistics were calculated. Independent sample t-test was used to examine significant differences between mean quantitative variables of the two groups. Moreover, the Spearman and Pearson's correlation coefficients were used to examine the correlation between the self-efficacyscores

and their age, andself-care. the regression coefficient use to evaluate Status predictor of self-afficacy situation on self-care. The level of significance was considered less than 0.05.

RESULTS

The results showed thatindex meansself care is 77(±14). According the results, there is relatively high level of self care in the patients' (Table 1). These results are in good agreement with those Azarbad *et al.* [10] reports there is relatively high level of self care in the patients'. The results showed that index means self care is 59 (±14)(Table 1).These patients have a good level of self-efficiency. Because of the importance of the need for sensitivity to treatment and follow-up care in this group of patients.These results are in good agreement with those Hossinzadeh *et al.* [10].

Table-1: Result of Means, SD for self-efficacy and self- care

Variable	Min	Max	Mean	SD
self-efficacy	13.24	94.12	59	14
self-care	20	100	77	14

Table 2 shows the relationship between demographic and self-care. According the results, there is significant relationship between age and self-care. As self-care rates declined with increasing age and level of highest self care was in men. It seems that with

increasing age, physical and mental abilities decline and achieve to optimal self-efficacy reduced in patients. The results are agreement with the findings Direk and Celik [11].

Table-2: Result of Means, SD for self- care according to information demographic

Demographic		Self-care		SEM
		Means	SD	
Sex	Male	80.7	15	0.008
	Female			
		69.5	21	
level of education	Lower than diploma	57	15	0.02
	Diploma			
		61.5	8	
	Higher than diploma	69.5	12.5	
Marital status	Single	64	22.6	0.37
	Married	77.6	18	
	Other	75	0	

Table 3 shows the relationship between demographic and self-efficacy. According the results, there is significant relationship between education of level and self-care. With increasing levels of education was increased self-efficacy in patients'.

Table 4 shows the relationship between self-care and self-efficacy. According the resultswith increasing levels of self-efficacy was increased self-care in patients'. The results are agreement with the findings Abedi *et al.* [4] and Balbasteh [12] reports there issignificant relationship between self-efficacy and Self- Care in diabetic patients.

Table-3: Result of Means, SD for self-efficacy according to information Demographic

Demographic		Self-efficacy		SEM
		Mean	SD	
Sex	Male	61.72	13	0.01
	Female			
		54.5	13	
level of education	Lower than diploma	57	15	0.01
	Diploma	61.5	8	
	Higher than diploma	69.5	12.5	
Marital status	Single	38.7	23	
	Married	60	13	0.02
	Other	52	1	

Table-4: Result of relationship betweenself-efficacy and Self- Care

Variable	Correlation coefficient	SEM
Self-Care-self-efficacy	0.38	0.0001

CONCLUSION

This study represents a relatively high level of self-care in cabg patients. Perhaps to say because of the importance, urgency and sensitivity to treatment and follow-up care in this group of patients. The mean (± SD)were self- efficacy score 59 (± 14). In fact, self-efficacy is predictive role for self-care.

The results of Hosseinzade study showed that in patients with coronary artery disease and factors as predictors show that these patients are good self-efficacy levels (17). As well as having the disease history and hospitalization can result in information, understanding and skills and, ultimately, self-efficacy is relatively favorable. Among the demographic variables, education level, gender and age were significantly associated with both variable-efficacy and self-care With increasing levels of education, self-care in these patients increased, Men participating in the study had self-care than women. Moreover, with age increasing, self-care of the people declined. The results of the study Mohammad Hosseini (22) as self-care behaviors in patients after CABG is consistent. It is also consistent with results in 2012, with direk (18).

Patients after heart surgery are required to self-care behaviors than any other disease . Therefore, encouraging patients to participate and take responsibility in doing the right thing in promoting health and preventing relapse is important. Re-examine the relationship between self-care and self-care is particularly important in patients cabg due to the need to determine the role training by nurses in improving patient education, prevention of readmission, the importance of care in these patients as well as Participation and responsibility for health promotion in patients is very important.

Conflicts of interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of this article.

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