

## Effect of Health Education on Depression of patients with Cardiac Catherization

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### الخلاصة

تقييم أثر التثقيف الصحي على اكتئاب المرضى الذين ستجري لهم القسطرة القلبية في ردهات الباطنية، في المركز العراقي لأمراض القلب باستخدام مقياس بك للاكتئاب حيث جمعت العينة من خلال تقديم الاستمارة للمريض والذي قام بتعبئتها بنفسه، ثم توضيح عملية القسطرة له عن طريق كتيب تم فيه تعريف القسطرة وطرق إجرائها واستخداماتها وتعليمات خاصة بالمريض. أظهرت الدراسة الأثر الواضح للعملية التثقيفية الموجهة إلى المريض قبل إجراء القسطرة القلبية في تخفيض مستوى الاكتئاب.

### Abstract

To evaluate the effectiveness of health education on depression of patient with cardiac catherization. A quasi experimental. In Medical ward at Iraqi center for heart disease. Beck Depression inventory (BDI). After coping style assessment, received the patients educational teaching booklet for the cardiac catherization to decrease level of depression before, during and after the cardiac cauterization. There would be a statistically significant decrease mean scores of depression from the cardiac catherization to the post cardiac as a result of teaching manual.

The nurse observer behavioral response system data revealed that patient who received educational teaching booklet less in pre cardiac catherization than in post cardiac catherization.

### Introduction

Cardiac catheterization is a diagnostic procedure that used to evaluate patients with suspected coronary artery disease and valvular disorder.

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Data obtained from cardiac catheterization have been used in the construction of a treatment regimen for these patients to fully cooperate with the medical plan of care, patient facing cardiac catheterization need to have a basic understanding of the procedure itself, information obtained from it and the anticipated use of this information<sup>[1]</sup>. Patient depression is also a consideration when a serious invasive procedure is performed especially on an organ such as the heart so cardiac catheterization may be an elective or emergency procedure, depending on the patient's emotional status.<sup>[2]</sup>

### **The objective**

The objective of this study is to evaluate the effectiveness of health education on self report depression of patient with cardiac catheterization.

### **Methodology**

A quasi experimental design was used for this study, the study population consisted of 25 patients (who are 16 male a 9 female) consecutive admitted for same day catheterization. in selected of medical word at Iraqi center for heart disease. During January, Feb and March. 2008, the sample was selected from the daily schedule of catheterization's laboratory without regard to race, sex and diagnosis. The sample was restricted to patients who met the following criteria.

- 1) Patients with first coronary catheterization.
- 2) Patients must have the ability to read, write and understand the Arabic language.
- 3) Be alert enough to read the educational teaching booklet and to complete the pre and post self report depression
- 4) Be free from incapacitating physical or psychological discomfort at the time of rest.
- 5) The patient informed consent to participate in the study.
- 6) Not a member of a health profession.
- 7) (18-80) years of age.

On the day of catheterization 2hrs, before scheduled catheterization after the physician had signed the consent form or had granted verbal permission, the investigator

visited the patients in their room. The purpose of the study was explained and the informed consent form was given to the patient for review. All questions regarding the study were answered at the time, after informed consent form was signed, the patient return questionnaire and obtained from the chart any demographic data, each patient was asked to complete the (13) self rating depression scales. The scale had four point type liker rating scale (never, mild, moderate, sever), These rating were scored as. 0,1, 2, and 3. A modified standardized questionnaire (BD1) was used to evaluate the psychological status at the pre and post catheterization period. It was translated and modified into the Arabic language<sup>[31]</sup>

The questionnaire was modified by these researchers to suit the Iraqi population. patients in the study group provided a copy of the educational teaching booklets and left the patient alone to read through the booklets which it is explained to patients the purpose of cardiac catheterization, anatomy of coronary artery, type of catheterization, outline of the procedural events occurring before, during and after the cardiac catheterization, and the investigator answered patient's about all questions related to catheterization. One hour after catheterization, the investigator return to the same patient who was asked to complete the self rate depression forma, in most cases data collection was completed. The reliability of the modified questionnaire was demonstrated by test-retesting which revealed correlations ranging from (0.73) to (0.86). Construct validity was established easily without ambiguousness .

Statically analysis:

- 1- Percentage was used to calculate the description of the sample.
- 2- Mean and standard deviation were computed to estimate the value of data.
- 3- T- Test used to determining the deferent between the pre and immediate post catheterization.

**Table(1) Characteristic of the patients.**

Variable		number	%
Age	(18-38)	3	%1
	(39-59)	16	%6
	(60-80)	6	%7
Meanage		50	
Sex	Male	16	%6
	Female	9	%3
		4	%1
Education		5	%2
		7	%2
		4	%1
		5	%2

**Table(2) comparison of self rating depression between pre and immediate post catheterization.**

Stress status	Pre catheterization		Immediate after catheterization		C.S
Depression	-X 20.30	SD 6.69	-X 16.38	SD 6.92	S

**Results and discussion**

This study provides data on the effects of preexisting copying styles on measuring patient depression before and immediate after the cardiac catheterization procedure. It demonstrates that patient's depression and immediate before the procedure can be operational zed to some extent after the cardiac catheterization by measuring patient's depression self reported<sup>[4]</sup>.

Patients are often admitted to the hospital for invasive and diagnostic procedures which are distressing as surgery itself, catheterization in such a procedure. It may be stressful for a number of reasons. During catheterization, the patient is usually conscious or semiconscious and thus may fully experience discomfort often associated with the event. Additional stress include fear of unknown and fear that the

result of the test will indicate severe dysfunction or need of vascular surgery<sup>[5,6]</sup>

The mean sample age was 50 years in the studied group (16 male and 9 female) (table 1). Reports<sup>[7,8]</sup> stated that each individual experiences stress associated with threats of biologic integrity, in our study there would be a statically significant decrease in mean scores from the pre cardiac catheterization to the post cardiac catheterization as a result of the teaching manual, ( $P < 0.05$ ) (Table 2).<sup>[9]</sup> Sterile states that an immediate goal of patient education is to reduce anxiety and depression.

Many studies<sup>[10, 11]</sup> have supported the positive effects of psycho educational interventions for persons scheduled for medical events, but few have presented their process for gathering the intervention information and evaluating its effects. Because preparation of patients for medical nursing events is a major responsibility of the professional nurse, the nurse must be sure that information is both accurate and that stress is reduced helping the patient to adapt they consider it to be a major means of the study<sup>[12]</sup>. There have been many studies that focus on teaching as a means of reducing stress. Our study confirmed that apprehension and depression were reduced by teaching<sup>[13]</sup>, which involved the use of written educational aids. Found that the amount of educational aids, found that the amount of education appeared to be the best predictor of ability to comprehend, the instructional material needs to be composed in an easy understandable manner, so that it could be comprehended patients of various educational background and reading skills.

### **Conclusion**

Our result demonstrated the benefit of psychology preparation for cardiac catheterization at self report depression.

### **Recommendations**

According to the result of study. The investigator recommended that:

1. A qualified nurses should take the responsibility to determine the information preparation of patient's to cardiac catherization.
2. Establishment of an educational teaching booklet about cardiac catherization because it can teach a large number of patient in a short period of time.
3. Further studies involving studies a large number of patient can be conducted to detect that the health education can influence the patient overall adaptation.
4. Establishment of an educational teaching booklet about cardiac catherization
5. Further studies involving a large number of patient can be conducted to detect that the health education can influence the patients overall adaptation.

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