

71 - EPIDEMIOLOGICAL PROFILE OF PATIENTS UNDERGOING CARDIAC CATHETERIZATION AT A HEMODYNAMICS UNIT IN NATAL/RN

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INTRODUCTION

Cardiac catheterization is an invasive test for diagnostic and therapeutic procedures performed in a surgical environment using local anesthesia. The puncture location may be in upper or lower limb, in which catheters are inserted into specific blood vessels reaching right and left atria of the heart (FREITAS; OLIVEIRA, 2006).

According to Lima (2007), catheterization is used to determine diagnosis of Coronary Artery Disease (CAD), to evaluate coronary artery permeability and existence of atheromatous plaques based on the percentage of coronary artery obstruction. Others abnormalities may be observed during catheterization as coronary tortuosity, intramyocardial bridge and congenital abnormalities. Intramyocardial bridging is a situation in which part of the artery runs through the heart muscle suffering a narrowing during heart contraction (TEBET et al., 2008).

Catheters are guided by contrast injection, which are radiopaque substances percutaneously inserted into blood vessels through puncture. When the patient presents difficult access, dissection technique is used (Smelt, BARE, 2005). There are complications related to cardiac catheterization and these are the main factors limiting this technique, which can vary from mild and transient events to the serious. Amongst these complications are Acute Myocardial Infarction (AMI) or death (ROSSATO et al., 2007).

According to the World Health Organization (WHO) Cardiovascular Diseases (CVD) are responsible for about 30% of deaths in the world, thus justifying the importance of research in this area, aimed to identify more specific risk factors besides seeking appropriate forms of promotion, prevention and treatment of CVD. CVD may be triggered by hereditary factors considered non-preventable and by lifestyle factors considered modifiable. Despite the advancement of science and technology, CVD continues to be of concern mainly due to increased incidence of cardiovascular diseases (Freitas, Oliveira, 2006).

Interest at studying this thematic arose during extracurricular internship at the hemodynamics unit, where we had the opportunity to experience care to patients undergoing cardiac catheterization. In this context, it was emerged the following question: what is the epidemiological profile of patients undergoing cardiac catheterization at a hemodynamics unit in Natal/RN? In order to answer our questions we developed the following goal: to identify epidemiological profile of patients undergoing cardiac catheterization at a hemodynamic unit in Natal/RN.

MATERIAL AND METHODS

This is an exploratory-descriptive research with prospective data and quantitative approach carried out at the hemodynamics sector of a Private Hospital in Natal/RN. Population consisted of all patients undergoing cardiac catheterization, both for diagnostic and therapeutic purposes. These patients were being seen in the catheterization laboratory and agreed to participate in the study which took place in February and March, 2010.

The exploratory studies define the research by criteria, methods and techniques and acquire more information on a particular subject; accustoming to the subject matter or to get new perception of the same; elaborate accurate descriptions about the thematic and the existing relations between elements of the same (HART; BERVIAN, 1996; CRUZ; RIBEIRO, 2004).

The instrument for data collection consists of 13 closed questions related to socio-demographic and clinical characteristics. The same was applied during business hour of the unit, after the procedure, period of recovery and wait which varies from two to six hours after the procedure until patient discharge.

The obtained data were electronically categorized and processed through Microsoft Excel XP software, analyzed by descriptive statistics and presented in tables.

RESULTS AND DISCUSSION

In this first moment will be made a presentation of the results of table 1 which contains data about the distribution of patients undergoing cardiac catheterization as to: gender, age group, race, level of education, family income and marital status.

TABLE 01 - Characterization of patients undergoing cardiac catheterization at a hemodynamics unit as for: gender, age group, race, level of education, family income and marital status. Natal/RN – 2010.

VARIABLES	N	%
Gender		
Male	28	62.2
Female	17	37.8
Age group		
Up to 30 years	1	2.2
31 to 50 years	8	17.8
51 to 70 years	24	53.3
71 to 90 years	12	26.7
Race		
Caucasian	39	86.7
Black	3	6.7
Mulatto	3	6.7
Yellow	0	0

Level of education		
Illiterate	0	0
Incomplete Elementary school	4	8.9
Complete Elementary school	8	17.8
Incomplete High School	1	2.2
Complete High School	15	33.3
Incomplete Higher education	1	2.2
Complete Higher education	13	28.9
Incomplete Postgraduate	1	2.2
Complete Postgraduate	2	4.4
Family income (minimum wages)		
Up to 2 MW	1	2.2
3 to 5 MW	19	42.2
6 to 10 MW	11	24.4
Above 10 MW	14	31.1
Marital status		
Single	2	4.4
Married	40	88.9
Stable companionship	0	0
Divorced	2	4.4
Widowers	1	2.2
TOTAL	45	100.0

As we can observe in Table 01, most of the patients were male 28 (62.2%), followed by women 17 (37.8%). With regard to age groups, it was prevailed the ones who were within 51 to 70 years (53.3%), followed by those above 70 years, containing 12 (26.7%).

These findings corroborate with what is published in literature, since women take more care of their health throughout the life cycle, whereas men in addition to not seek for preventive care, they are more exposed to risk factors as smoking, alcohol consumption, high calorie diet, sedentary lifestyle, among others (COELHO; RESENDE, 2006; ROSSATO et al., 2007; MUNHOZ JÚNIOR et al., 2007).

The increase in life expectancy and technology advancements allowed greater longevity and population aging justifying in part the increase in hospitalization of people in this age group coupled with the fact that they are more susceptible to diseases due to physiological aging process itself (ROSSATO et al, 2007).

Caucasians 39 (86.7%) predominated among the surveyed. This finding is partly due to the fact that the hospital conduct examinations by health insurances and in this country Caucasians have better financial conditions than those of another race, thus being able to cover the costs of a private health insurance.

According to the census conducted in 2000, data shows that 91.298.042 Brazilians are Caucasians, what is in accordance with the result of our research (IBGE, 2000).

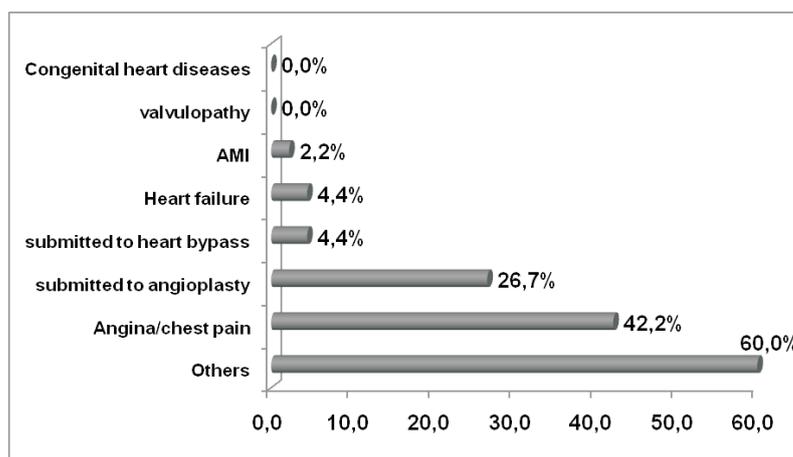
In relation to the level of education there was predominance of patients with complete high school 15 (33.3%), followed by complete higher education 13 (28.9%) and complete primary 8 (17.8%). Brazil has been showing better school levels with government social programs to encourage education, with special attention to the education project for elderly and more recently the "Bolsa-escola" social program that pays families for keeping their children younger than 14 years in elementary school (IBGE, 2006).

Regarding the family income, most of the surveyed informed having 3 to 5 minimum wages mensal 19 (42.2%), followed by those having a income above 10 minimum wages 14 (31.1%) and the ones with income between 6 and 10 minimum wages, 11 (24.4%).

In accordance with data from IBGE, the number of workers with signed work card in 2006 was 30.1 million denoting a growth of 4.7% in this form of integration and resulting in an increase of 1.3 million of employed people. Those workers now account for 33.8% of the employed people. In 2005, they accounted for 33.1%. In 2006, military and civil servants were 5.9 million and increased 7.4% over 2005. Participation of this category in the employed people rose from 6.3% to 6.6% from 2005 to 2006 (IBGE, 2007).

With regard to marital status, the married patients predominated 40 (88.9%), followed by singles 2 (4.4%), divorced 2 (4.4%) and widowers patients 1 (2.2%). In 2002, the mean number of family members remained the same in almost all regions and so the average for the country stood at 3.3 persons, according to the Synthesis of Social Indicators of 2003.

GRAPH 01 - Distribution of patients undergoing cardiac catheterization at a hemodynamics unit by indications for catheterization. Natal/RN – 2010

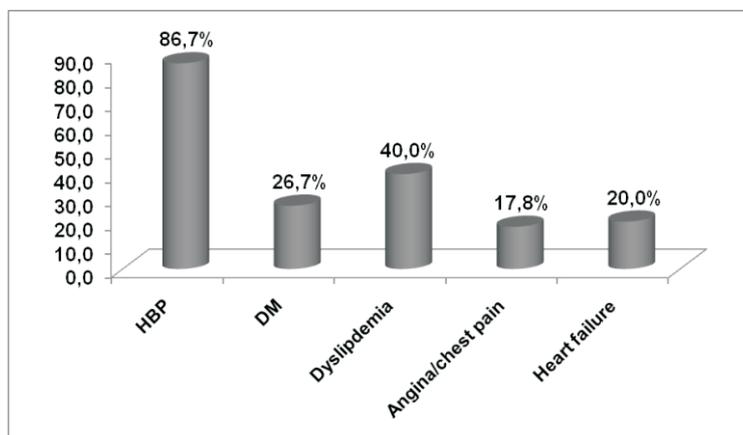


According as graph 01 we can observe that in relation to indication for catheterization there was predominance of procedures performed by other reasons 27 (60.0%), besides the ones specified in research instrument. This is partly due to the number of situations that motivate catheterization to be individualized to the need and clinical status of each patient.

Among the indications covered by the instrument angina or chest pain was the most common 19 (42.2%), followed by patients who previously underwent angioplasty 12 (26.7%), patients who previously underwent heart bypass 02 (4.4%), heart failure 2 (4.44%) and myocardial infarction 1 (2.2%).

None of the surveyed had as indication for catheterization congenital heart disease and valvulopathy.

GRAPH 02 - Distribution of patients undergoing cardiac catheterization at a hemodynamics unit by comorbidities. Natal/RN – 2010



According as graph 02, comorbidity that had greater predominance was High Blood Pressure (HBP) 39 (86.7%). The HBP is the factor which most triggers heart problems. Among them is the Acute Myocardial Infarction (BRITO JÚNIOR et al., 2007).

Among the comorbidities presented by the instrument the more frequent after HPB was Dyslipidemia 18 (40.0%), followed by Diabetes Mellitus (DM) 12 (26.7%), Chronic Heart Failure (CHF) 9 (20.0%) and Angina 8 (17.8%).

CONCLUSIONS

Most patients were male 28 (62.2%) who were between 51 to 70 years (53.3%), Caucasians 39 (86.7%), having finished high school education 15 (33.3%) followed by complete higher education 13 (28.9%). As to family income, the majority of the surveyed reported having a family income between 3 and 5 minimum wages 19 (42.2%), followed by those with income above 10 minimum wages 14 (31.1%). With regard to marital status, married patients predominated 40 (88.9%), followed by singles 2 (4.4%).

Concerning the Indication for catheterization there was predominance of procedures performed by other reasons 27 (60.0%) besides the ones specified in the research instrument. Among the indications covered by the instrument angina or chest pain was the most common 19 (42.2%), followed by patients who previously underwent angioplasty 12 (26.7%). The comorbidity which had greater predominance was High Blood Pressure (HBP) 39 (86.7%).

1.1. It is concluded, therefore, that priority is to continue to carry out research on these themes and at the same time to invest in development of researches directed to clinical and epidemiological aspects contributing to a better preparation of health professionals working in this area.

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EPIDEMIOLOGICAL PROFILE OF PATIENTS UNDERGOING CARDIAC CATHETERIZATION AT A HEMODYNAMICS UNIT IN NATAL/RN

ABSTRACT

This is an exploratory-descriptive research with prospective data and quantitative approach carried out at the hemodynamics sector of a Private Hospital in Natal/RN aiming to identify epidemiological profile of patients undergoing cardiac catheterization at a hemodynamics unit in Natal/RN. Forty five patients were surveyed using a form with closed questions. Of these, 28 (62.2%) were male, 53.3% were between 51 to 70 years, 39 (86.7%) were Caucasians, 15 (33.3%) finished high school education, 19 (42.2%) have income between 3 and 5 minimum wages and 40 (86.7%) were married. Concerning the Indication for catheterization there was predominance of procedures performed by other reasons 27 (60.0%) and 19 (42.2%) by angina/chest pain. The comorbidity which predominated was High Blood Pressure (HBP) 39 (86.7%). Thus, we can conclude that patients undergoing cardiac catheterization showed having an advanced age, sedentary lifestyle and HBP among other comorbidities, being the majority attended with angina/chest pain.

KEY-WORDS: Cardiac Catheterization; Epidemiological profile; Nursing.

PROFIL ÉPIDÉMIOLOGIQUE DE PATIENTS SOUMIS AU CATHÉTÉRISME CARDIAQUE DANS UNE UNITÉ D'HÉMODYNAMIE DE NATAL/RN.

RESUMÉ

C'est une étude exploratoire-descriptive, avec des données prospectives et une approche quantitative, réalisée en hémodynamie d'un hôpital privé de Natal/RN, avec l'objectif d'identifier le profil épidémiologique chez les patients soumis à des cathétérismes cardiaques dans une unité d'hémodynamie de Natal/RN. Les recherches ont été effectuées sur 45 patients, à travers un formulaire de questions fermées. De ceci, 28 (62,2%), étaient des hommes, de 51 à 70 ans (53,3%), race blanche 39 (86,7%), avec le niveau scolaire terminale 15 (33,3%), avec une rente de 3 à 5 salaires minimum 19 (42,2%), mariés 40 (88,9%). Quand l'indication du cathétérisme a eu une prédominance de procédures exécutées pour d'autres raisons 27 (60%) et 19 (42,2%) par angine de poitrine/douleur thoracique. La comorbidité qui prédominait était l'hypertension artérielle systémique (HAS) 39 (86,7%). Ainsi, nous pouvons conclure que les patients soumis au cathétérisme cardiaque présentaient un âge avancé, étaient sédentaires et avaient de l' HAS entre autres comorbidités, la plupart étant reçu pour des angines/douleurs thoraciques.

MOTS-CLÉS: Cathétérisme Cardiaque; Profil Épidémiologique; Soins Infirmiers.

PERFIL EPIDEMIOLÓGICO DE PACIENTES SOMETIDOS A CATETERISMO CARDÍACO EN UNA UNIDAD DE HEMODINÁMICA EN NATAL/RN

RESUMEN

Este es un estudio exploratorio-descriptivo, con datos prospectivos y estudio cuantitativo de la hemodinámica en un hospital privado en Natal, con el objetivo de identificar el perfil epidemiológico de los pacientes sometidos a cateterismo cardíaco en una unidad de hemodinámica en Natal RN. Fueran estudiados a 45 pacientes, usando un formulario con preguntas cerradas. De estos, 28 (62,2%) eran del sexo masculino; con edad entre 51 a 70 años (53,3%), caucasianos 39 (86,7%) con nivel de educación secundaria 15 (33,3%) con sueldos entre 3 y 5 salarios mínimos 19 (42,2%), casados con 40 (88,9%). Había predominancia de la indicación de los procedimientos de cateterismo por otras razones 27 (60,0%) y 19 (42,2%) para la angina de pecho y dolor en el pecho. La principal comorbilidad fue la hipertensión arterial (HTA) 39 (86,7%). Se concluye que los pacientes sometidos a cateterismo cardíaco tenían como factores de riesgo la edad avanzada, el sedentarismo y la hipertensión; la mayoría que fue atendida para hacer el examen estaba con dolor en el pecho.

PALABRAS CLAVE: cateterismo cardíaco, perfil epidemiológico, Enfermería

PERFIL EPIDEMIOLÓGICO DE PACIENTES SUBMETIDOS A CATETERISMO CARDÍACO EM UMA UNIDADE DE HEMODINÂMICA EM NATAL/RN

RESUMO

Trata-se de um estudo exploratório-descriptivo, com dados prospectivos e abordagem quantitativa, realizado na hemodinâmica de um hospital privado de Natal/RN, com o objetivo de identificar o perfil epidemiológico de pacientes submetidos a cateterismo cardíaco em uma unidade de hemodinâmica em Natal/RN. Foram pesquisados 45 pacientes, através de um formulário com perguntas fechadas. Destes, 28 (62,2%), eram do sexo masculino, de 51 a 70 anos (53,3%), raça branca 39 (86,7%), com o ensino Médio Completo 15 (33,3%), renda entre 3 a 5 salários mínimos 19 (42,2%), casados 40 (88,9%). Quanto a Indicação do cateterismo houve predominância de procedimentos realizados por outros motivos 27 (60,0%) e 19 (42,2%) por angina do peito/dor torácica. A comorbidade que predominou foi a Hipertensão Arterial Sistêmica (HAS) 39 (86,7%). Assim, podemos concluir que os pacientes submetidos a cateterismo cardíaco apresentavam idade avançada, sedentarismo e HAS entre outras co-morbidades sendo, a maioria atendida com angina/dor torácica.

PALAVRAS-CHAVE: Cateterismo Cardíaco; Perfil Epidemiológico; Enfermagem.