

Information Needs of Post Myocardial Infarction (MI) Patients: Nurse's Perception in Universiti Kebangsaan Malaysia Medical Centre (UKMMC)

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ABSTRAK

Pendidikan kesihatan merupakan suatu gabungan komponen utama di dalam jaga-rawatan pesakit serangan jantung. Pesakit selepas serangan jantung memerlukan informasi berkaitan dengan keadaan semasa mereka supaya dapat mengurangkan rasa gelisah dan membantu dalam proses penyembuhan. Objektif kajian ini adalah untuk mengenalpasti persepsi jururawat terhadap keperluan informasi pesakit pos serangan jantung (myocardial infarction). Kajian rentas yang menggunakan 'Cardiac Patient Learning Needs Inventory (CPLNI)' diadaptasi dari Timmins and Kalizer (2002). CPLNI mengandungi tujuh kategori: 1) berkaitan dengan anatomi and fisiologi, 2) faktor psikologi, 3) faktor cara hidup, 4) maklumat ubatan, 5) maklumat pemakanan, 6) aktiviti fizikal dan 7) pengurusan gejala. Kajian ini telah dijalankan di unit rawatan jantung 'CCU', wad pemulihan jantung 'CRW', wad perubatan 1 dan 2 daripada Januari 2007 ke Mac 2007. 56 responden (96%) yang memenuhi kriteria menyertai kajian ini. Hasil kajian melaporkan jururawat CCU dan CRW mengutamakan pengurusan gejala sebagai yang pertama diikuti oleh maklumat ubatan, faktor cara hidup, anatomi and fisiologi, maklumat pemakanan, aktiviti fizikal dan faktor psikologi. Manakala jururawat diwad perubatan 1 and 2 mengutamakan maklumat ubatan sebagai tahap yang pertama diikuti oleh pengurusan gejala, faktor psikologi, maklumat pemakanan, aktiviti fizikal, anatomi and fisiologi dan faktor cara hidup. Terdapat perbezaan yang signifikan diantara persepsi jururawat di wad mereka berkaitan dengan anatomi and fisiologi, faktor psikologi, faktor cara hidup, aktiviti fizikal dan pengurusan gejala dengan nilai $p < 0.05$. Kajian ini merumuskan bahawa keperluan informasi tidak serupa diantara jururawat CCU dan CRW dengan wad perubatan 1 dan 2. Jururawat CCU dan CRW mengutamakan pengurusan gejala manakala jururawat wad perubatan 1 dan 2 mengutamakan maklumat ubatan. Situasi ini perlu diperbaiki agar keperluan informasi pesakit selepas serangan jantung diubahsuai mengikut keperluan setiap individu dan keutamaan berasaskan keperluan setiap pesakit.

Kata kunci: pendidikan kesihatan, pos serangan jantung, pesakit, jururawat

ABSTRACT

Patient education has been considered as an integral component of care for patient after myocardial infarction. Post myocardial infarction patients require information and knowledge related to their conditions to reduce anxiety and aid recovery. The objective of this study was to identify nurses' perception on information needs of post MI patients of UKMMC. A cross sectional study using Cardiac Patient Learning Needs Inventory (CPLNI) adopted from Timmins and Kalizer (2002) was used. It comprises seven categories: related to anatomy and physiology, psychological factor, life style factor, medication information, dietary information, physical activity, and symptom management. This study was conducted in coronary care unit (CCU), coronary rehabilitation ward (CRW), medical ward 1 and medical ward 2 from January 2007 to March 2007. 56 respondents (96%) who fulfilled the inclusion criteria were recruited in this study. Results showed that CCU and CRW respondents ranked symptom management as their first ranking followed by medication, life style factor, anatomy and physiology, dietary information, physical activity and psychological factor. However, respondents in Medical Ward 1 and 2 reported and ranked medication information as their top priorities followed by symptom management, psychological factors, dietary information, physical activity, anatomy and physiology and life style factor. There were significant differences between ward nurses' responses with their perception related to anatomy and physiology, psychology factor, life style factor, physical activity, and symptom management with p value < 0.05. This study concluded that the information needs are not always perceived in unison by nursing personnel as the CCU and CRW nurses ranked symptoms management as the cardinal factor whilst Medical Ward 1 and 2 nurses give paramount importance to medication. In order to improve this situation for post MI patient, information need has to be tailored, individualized and prioritized based upon their needs.

Key words: Patient's education, post myocardial infarction, patient, nurses

INTRODUCTION

Cardiovascular disease is the third leading cause of death in Malaysia, and accounted for 29% deaths in 2002 (Ministry of Health, 2004). By international standards, this figure is of concern for Malaysia. Despite much scientific research and technological advancements, coronary heart disease remains a major cause of premature morbidity and mortality. Patient education has been considered as an integral component of care for patient after myocardial infarction (MI). Following an acute MI, the patient requires information and knowledge related to their

conditions to reduce anxiety and aid recovery (Almo-Rojjer et al. 2004). With information related to MI, patient and family members are able to make suitable changes in their lifestyle. Such undertaking is easier to be made if a patient understands the basic rationale for changes and the benefits.

Although teaching has been an integral component of nursing practice, in general, nurses are incompetent and lack confidence to deliver an effective patient education to post MI patients. Nurses play an important role to reemphasize information related to myocardial infarction such as life style, medications, diet,

psychological concerns, activities, stress management and symptoms. All these are crucial so that patient can manage the post discharge period safely and make informed decisions about potential lifestyle changes (Timmins 2005; Burney et al. 2002).

Nurses have preconceived ideas about what information is required for post MI patients which may cause them to overlook the genuine information needed by the patients. Hence, it is realistic to conclude that some of the important priorities of education process were overlooked. Knowles Theory of Andragogy, (1989), an adult learning theory, provides a guide by the principle that people tend to learn what they perceive as important to them. It is unlikely that the informal educational approach which is mostly unplanned and haphazard in manner will be ineffective in meeting the information needs of post MI patient. To achieve optimum patient's health education objective, the nurses should possess the ability to identify the post MI patient's own perception and readiness to learn and acceptance of the information of what are relevant at this point of time (Timmins & Kaliszer 2002).

In addition, Chan et al. (2004) stated that early commencement of patient education enhances quality of life and positive outcome to the post MI patients. As the post MI patients' information needs depend upon nurses to get their needs met, it is crucial to conduct this study in UKMMC. The objective of this study was to identify nurses' perception on information needs of post MI patients of UKMMC. As there is a dearth of research on this topic, the results of this study should be able to highlight the importance of information needs among post MI patient of UKMMC in a meaningful way that will contribute to improving the overall delivery of quality nursing care.

MATERIALS AND METHODS

A cross sectional study using Cardiac Patient Learning Needs Inventory (CPLNI) adopted from Timmins & Kalizer (2002) was used. The CPLNI was developed by Gerard (1982) to measure the congruency in perception of learning needs between the registered nurse and post myocardial infarction patients. The CPLNI contained 27 items which were arranged into seven categories: related to anatomy and physiology, psychological factor, life style factor, medication information, dietary information, physical activity, and symptom management. Nurses' socio-demographic data consisted of age, ward placement, length of services and marital status. This study was conducted at Coronary Care Unit (CCU), Coronary Rehabilitation Ward (CRW), Medical Ward 1 and Medical Ward 2 of UKMMC from January 2007 to March 2007. An illustration of the attributes of this study, as a conceptual framework is shown in figure 1.

At the time of this proposed study, there were no formal classes offered to cardiac patients at UKMMC. Individualized instruction was given to patients by registered nurses without standard protocol. A sample of 62 registered nurses was asked to complete the questionnaire. These registered nurses have had varying educational backgrounds and levels of experience teaching myocardial infarction patients. Nurses who worked less than a year in the CCU, CRW, Medical Ward 1 and Medical Ward 2 and not consented to participate in the study were excluded.

RESULTS

Respondents of this study which consisted of 56 nurses (90%) were recruited.

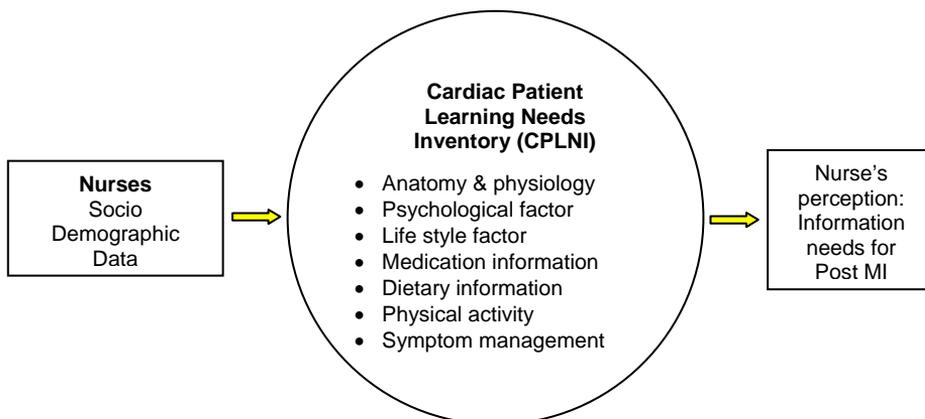


Figure 1: Conceptual framework

Six nurses (10%) did not complete the questionnaire given. A descriptive data of the respondents were presented in table 1. The findings of this study reported that CCU and CRW nurses ranked symptom management as top priority followed by medication and lifestyle factor. However, nurses in Medical Ward 1 and Medical Ward 2, ranked medication, symptom management and psychology factor as the top priority (Table 2).

There were significant differences between ward nurses' responses with their perception related to anatomy and physiology, psychology factor, life style factor, physical activity, and symptom management with a p value < 0.05 (Table 3). However, there were insignificant differences between nurses' response with medication information and dietary information (p value > 0.05).

DISCUSSION

The findings of this study revealed that nurses in CCU/CRW have identified the four most important areas of learning needs of post myocardial infarction patients as: symptom management, medication information, lifestyle factor, and anatomy and physiology. However, nurses in Medical Ward 1 and 2 ranked

the four most important areas of learning needs of post myocardial infarction patients as: medication information, symptom management, psychological factors and finally dietary factors. In comparison, Karlik et al. (1990) found that patients identified life style factors, medication, and activity information as the most important learning needs. Their study also concluded that registered nurses ranked medication information, psychological factors, and physical activity information as the most important leaning needs (Kardik et al. 1990). The findings from these studies consistently indicated that post myocardial infarction patient chose lifestyle factors as one of the top three important learning needs while registered nurses did not (Chan et al. 1990, Kardik et al. 1990). According to Casey et al. (1984), 12 physicians, 33 nurses and 30 patients completed questionnaires in order to elicit similarities and differences in their perception of educational needs of patients' post MI. This study reported that general agreement existed between the three groups, since they all felt that dealing with emotions, medications, and risk factors were the most important areas of information needs. With regard to post MI patients in the hospital, Moynihan (1984) reported that the four most im-

Table 1: Respondents' socio demographic data.

Variables	Respondent (%)
Age	
22 - 30 years	32 (57%)
>31- 39 years	21 (38%)
> 39 years	3 (5%)
Ward	
Medical 1	15 (27%)
Medical 2	11 (20%)
CCU/CRW	30 (53%)
Length of service	
>1-3 years	26 (46%)
>3- 5 years	8 (14%)
> 5 years	22 (40%)
Marital status	
Single	22 (45%)
Married	31 (55%)

Table 2: Respondents' (CPLNI) ranking in order.

Variables	CCU & CRW Rank/Mean	Med 1 & Med 2 Rank/Mean
Anatomy& physiology	4 (4.49)	6 (3.98)
Psychological factor	7 (4.32)	3 (4.22)
Life style factor	3 (4.50)	7 (3.95)
Medication information	2 (4.60)	1 (4.63)
Dietary information	5 (4.47)	4 (4.10)
Physical activity	6 (4.37)	5 (3.99)
Symptom management	1 (4.70)	2 (4.52)

Table 3: Association between ward nurses' response with (CPLNI)

Variables		Mean ± SD	F	p value
Independent	Dependent			
Anatomy& physiology	CCU/CRW (n=30)	4.49 ± 0.49	4.09	0.022*
	Med 1(n=15)	3.98 ± 0.66		
	Med 2 (n=11)	4.33 ± 0.61		
Psychological factor	CCU/CRW (n=30)	4.32 ± 0.61	4.09	0.022*
	Med 1(n=15)	4.22 ± 0.50		
	Med 2 (n=11)	4.12 ± 0.70		
Life style factor	CCU/CRW (n=30)	4.50 ± 0.47	4.84	0.012*
	Med 1(n=15)	3.96 ± 0.69		
	Med 2 (n=11)	4.33 ± 0.61		
Medication information	CCU/CRW (n=30)	4.61 ± 0.45	0.32	0.729
	Med 1(n=15)	4.63 ± 0.42		
	Med 2 (n=11)	4.50 ± 0.47		
Dietary information	CCU/CRW (n=30)	4.47 ± 0.51	0.31	0.728
	Med 1(n=15)	4.10± 0.78		
	Med 2 (n=11)	4.14 ± 0.45		
Physical activity	CCU/CRW (n=30)	4.37 ± 0.54	4.09	0.022*
	Med 1(n=15)	4.10 ± 0.69		
	Med 2 (n=11)	3.82 ± 0.38		
Symptom management	CCU/CRW (n=30)	4.71 ± 0.32	4.06	0.023*
	Med 1(n=15)	4.52 ± 0.49		
	Med 2 (n=11)	4.27 ± 0.65		

P values < 0.05 significant difference

portant areas of information in ascending importance were risk factors, activities, medications and diet.

In this study, symptom management was ranked top priority among nurses in CCU/CRW but in Medical Ward 1 and 2, it was ranked as second. One possible

reason why symptom management was ranked higher by nurses may be presumed as early detection, therefore patient would be able to respond better with treatment and to reduce anxiety and aid recovery. The survival rate will be higher and the survivor would have better qual-

ity of life. However, judging patient information needs vary depending on the nurses rendering the nursing care and the influencing factors present such as the illness, severity, urgency, non-urgent and whether non-life threatening or life threatening (Hallstrom, et al. 2001). According to Timmins et al. (2003), it has been observed that nurse and patients tend to evaluate patients information needs differently. Some studies have shown nurses tend to underestimate patient information needs from physical and emotional perspective (Burney et al. 2002, Farrel 1991). The research findings of Hanssen et al. (2004) and Lauri et al. (1997) revealed that nurses underestimate patient needs which included information on illness and hospital process, apart from environmental needs which is congruent with this study.

Amongst nurses who were surveyed in this study, 60% had three to five years of experience. The length of services of nurses has great influence on their abilities in decision making. A nurse who has less number of years of experience, may not be able to identify adequate information most ideal to be delivered to the post myocardial infarction patient. According to Benner (2000), a novice nurse at her initial stage of development, has no experience in real life situation. As an advanced beginner, a nurse gradually has experience in real life situations and can recognize different elements. They tend to focus on tasks and routines rather than on patient care. A competent nurse has acquired adequate knowledge and experience and has the ability to deal with elements in a situation by organizing them hierarchically; draws on past experience and is able to increase her involvement with patients. A proficient nurse is able to operate more intuitively; can discriminate in difficult situations. An expert nurse possess the intuitive grasp of a situation based on past experience; knows what to do from individual patients

perspective as well as from patients' condition. Several studies also reported similar findings related to patient education and appropriateness information to be disseminated (Timmins 2005, Hallstrom & Elander 2001; Adam, 2002).

CONCLUSION

This study concluded that the information needs are not always perceived in unison by nursing personnel as the CCU and CRW nurses ranked symptoms management as the cardinal factor whilst Medical Ward 1 and 2 nurses give paramount superiority to medication. In order to improve this situation for post MI patient, information need has to be tailored, individualized and prioritized based upon their needs. This will enable post myocardial infarction patients to find a meaningful way to adopt a healthier lifestyle and understand the importance of risk factors reduction.

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