Understanding brief illness perception among cardiac patients: A preliminary study

by

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Introduction

- Illness perceptions involve personal beliefs that patients have about their illness and it may influence their health behavior

- The beliefs that patients hold about their disease and corresponding treatment have shown to predict recovery in patients

Background information…CSM

- **Common sense Model of Self Regulation ("Common-Sense Model', CSM)** is a

widely used theoretical framework that explicates the processes by which patient become aware of the health threats, navigate affective responses to the threat, formulate perceptions of the threat and potential treatment actions by creating action plans for addressing the threat.

Leventhal, H. et al;
1980

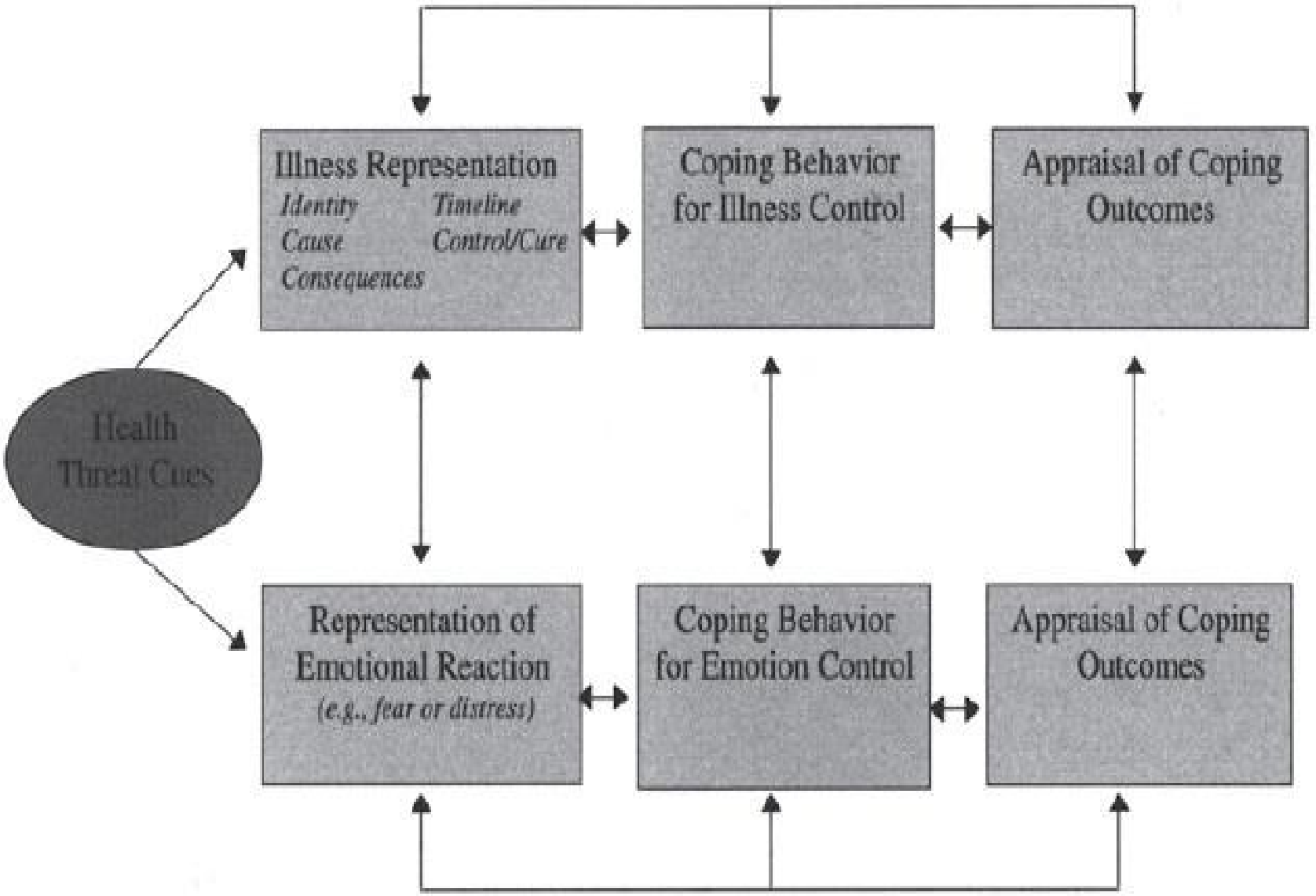


Figure 3. The commonsense model of health and illness self-regulation.

Problem statement

- CSM predicts that how patients cope with their **illness** is critically determined by what they **believe** (what they perceive ??)
- How one will be able to measure on what they perceive about their illness? (Illness perception)?

Research objectives

- To evaluate the understanding of brief illness perception among cardiac patient
- To determine the correlations of each of the items

Literature Review

- Illness perception of acute myocardial infarction predicts their attendance to cardiac rehabilitation programme and can be altered to sustain or influence patient's attendance

French P.David et al; 2006

Methodology

- **Study setting:**
- Cardiac ward

- **Study design**
- Cross sectional survey design with Brief Illness Perception Questionnaire (BIPQ) 9 items to evaluate the cognitive and emotional representation of illness
-

Methodology…instrumentation

Brief

- Item 1-consequences
- Item 2- timeline

} cognitive illness representation

Illness

- Item 3- personal control
- Item 4 – treatment control
- Item 5- identity

} cognitive illness perception

Perception Questionnaire

- Item 6 – concern
- Item 8- emotion

} emotional representation

- Item 7- understanding/coherence
- Item 9- causal item

} comprehensibility

Coefficient alpha of the 8 items was 0.804, adapted from Broadbent, E; 2006)

Methodology… cont'

- **Ethical consideration**

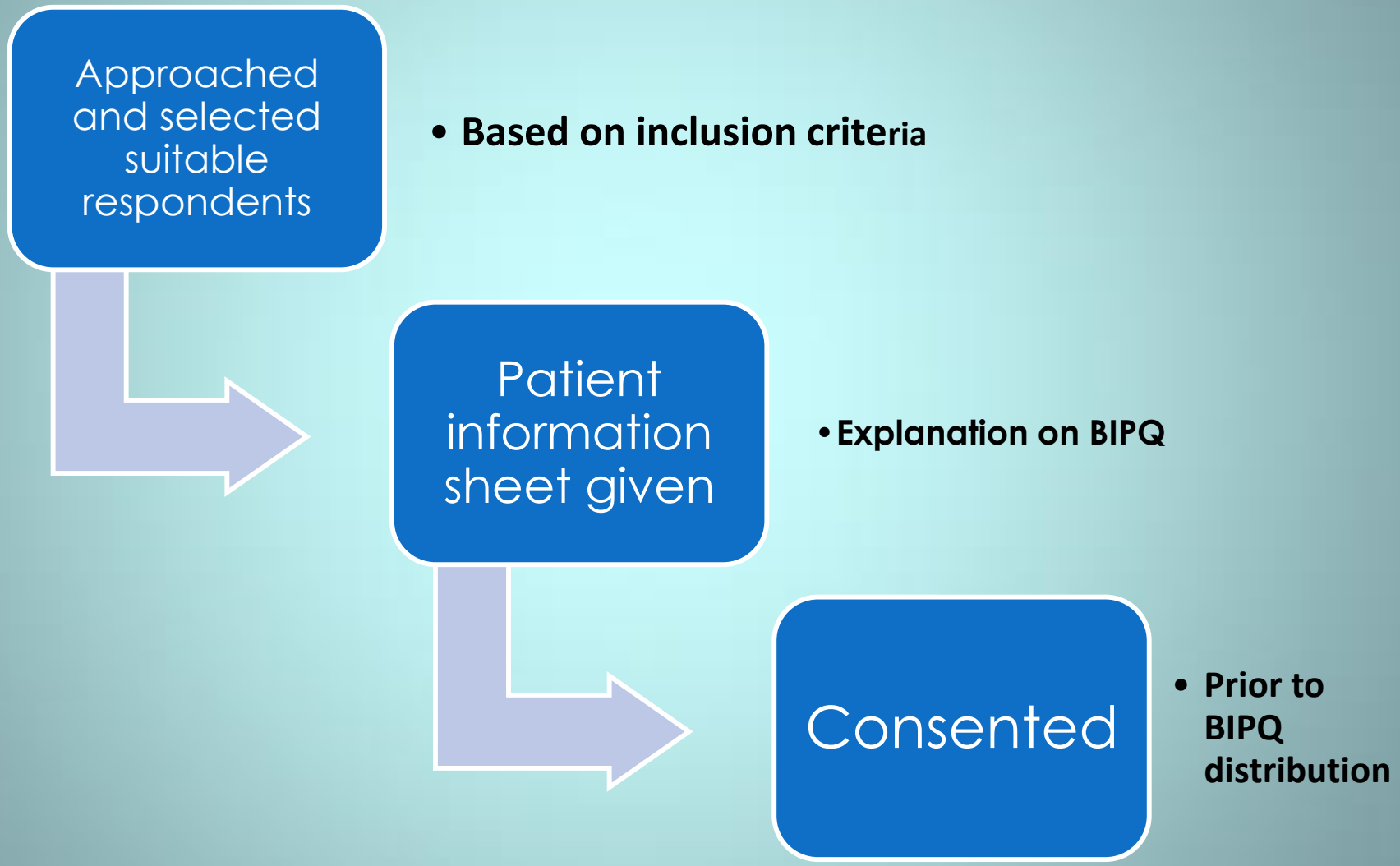
- Ethical permission was obtained from the hospital ethical committee
- Patient were informed and consent forms were obtained prior to distribution of questionnaires

Methodology… cont'

- **Inclusion criteria:**
- Diagnosis of ACS- STEMI & NSTEMI, Unstable Angina and Ischemic Heart Disease
- Age group 30 -70 years
- Had gone for angiogram and angioplasty

- **Exclusion criteria:**
- Patient had major complications such as major psychiatric illness or chronic renal failure
- Untreated malignancy such as cancer and tumour or on chemotherapy
- Neurological disorder or impaired cognition

Methodology… Data Collection



Results: Demographic data (n=40)

		Frequency (n)	Percentage (%)
Age	40-55 years	19	47.5
	56-70 years	21	52.5
Gender	Male	29	72.5
	Female	11	27.5
Ethnicity	Malay	16	40.0
	Chinese	17	42.5
	Indian	5	12.5
	Others	2	5.0
Educational level	Primary	11	27.5
	Secondary	11	27.5
	Diploma	13	32.5
	Degree	5	12.5

Results: Demographic data (n=40)

		Frequency (n)	Percentage (%)
Marital status	Married Single	38 2 0	95 5 0
Employment status:	Government Private Retired Not employed	10 13 12 2	25 32.5 30 7.5

Results: Clinical history

Past cardiac history			Frequency	Percentage
	Chest pain	Yes No	23 17	57.5 42.5
	Angina	Yes No	38 2	95.0 5.0
	Have done angioplasty with stent	Yes No	23 17	57.5 42.5
	Have gone for open heart surgery	Yes No	32 8	80.0 20.0
Comobidities	Diabetes mellitus Peripheral vascular disease Stroke	Yes No Yes No Yes No	27 13 11 29 0.0 0.0	67.5 32.5 27.5 72.5 0.0 0.0

Results: Past clinical history

			Frequency (n)	Percentage (%)
Cardiac risk factors				
	Current smoker	Yes	35	87.5
		No	5	12.5
	History of smoking	Yes	21	52.5
		No	19	47.5
	Hypercholesterolemia	Yes	29	72.5
		No	11	27.5
	Hypertension	Yes	33	82.5
		No	7	17.5
	Sedentary life style	Yes	35	87.5
		No	5	12.5
	Involvement in cardiologist care	Yes	4	10.0
		No	36	90.0
	Attended any sort of cardiac rehabilitation programme	Yes	27	67.5
		No	13	32.5

Objective 1: Understanding of illness perception

Item	Mean	Standard deviation (SD)
How much do you think that your treatment can help your illness? (0-10)	8.03	0.920
How much control do you feel over your illness? (0-10)	7.20	1.713
How well do you feel you understand your illness? (0-10)	6.58	1.394

highest mean

lowest mean

Overall mean score of 7.04

	How much can treatment help your illness ? (Item 4)	How well do you feel you understand your illness? (Item 7)	How much does your illness affect your life? (Item 1)	How much does your illness affect you emotionally? (Item 8)	b) How concerned are you about your illness?? (Item 6)
a) How much control do you have over your illness?? (Item 3)	r = 0.50 0.01				
b) How concerned are you about your illness?? (Item 6)		r = 0.54 0.01	r = 0.75 0.01	r = 0.67 0.00	
c)How much does your illness affect you emotionally ? (Item 8)		r = 0.51 0.00	r = 0.53 0.00		r = 0.67 0.00

p value is significant at the level of 0.01

Discussion

- The findings of being concerned was related to perceiving consequences was similar to the findings of the study by Chew, *et al* (2017)
- Significant correlations were also noted between perceived personal and treatment control that were also similar to the study findings by Chew, *et al* (2017)
- The lowest possible score mean score in this study on understanding was similar in the study findings by (Terwee, CB; *et al* 2007).

Conclusion

- It is useful in clinical practice to assess and potentially modify patient's perceptions on understanding, emotional control, personal control, consequences and perceived concerned over their cardiac disease for adaptation of a best coping behaviour for a greater sense of control over their illness

References

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- Broadbent, E. ;et al The Brief Illness Perception Questionnaire. Journal of Psychosomatic Research. (2006 *Vol 60*, pp 631-637.

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