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Attributions for illness

and treatment interventions by

community nurses

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Abstract

The present study evaluated community nurses' attributions for a case patient's heart attack and their recommendations for treatment. 89 district nurses and health visitors completed a set of rating scales following a case vignette describing a patient who had suffered a heart attack and prior to which had either adopted a healthy lifestyle (n=47) or had maintained unhealthy behaviours (n=42). The results suggest that subjects in the unhealthy behaviour condition rated the case patient as less likely to follow advice, more responsible for their condition and rated the heart attack as more preventable. In addition, the results suggest that subjects were more likely to offer recommendations for behavioural change to the unhealthy case patient and that these recommendations were significantly related to internal attributions of patient responsibility. The results are discussed in terms of theories of health professionals' beliefs and behaviours.

Attributions for illness and treatment interventions by community nurses.

Within a medical perspective it is assumed that health professionals' behaviours are systematic and based on medical knowledge and an 'empirically derived set of shared beliefs' (Marteau and Johnston, 1990, p. 47). However, research has identified variability in the actions of health professionals in clinical settings such as in the diagnosis of asthma (Anderson, Freeling and Patel, 1983), the measurement of diastolic blood pressure (Bucknall, Morris and Mitchell, 1986) and the prescribing of drugs (Mapes, 1980). Such variability can be understood in terms of diverse levels of knowledge and education (Ley, 1981). However, recent research indicates that inconsistencies in health professionals' behaviour may be related to inconsistencies in beliefs, in particular, attributions for the cause of illness. The attributional model of helping behaviour suggests that if causes of a problem are perceived by others to be internal to the individual (ie. the individual is deemed responsible) the probability of helping behaviour will be reduced (Ickes and Kidd, 1976). In terms of illness, research has evaluated the relationship between professionals' beliefs about responsibility and the resulting interventions. For example, Brewin (1984) examined the association between medical students' beliefs about the causes of a hypothetical subject's life events and their willingness to prescribe medication. The results indicated that the likelihood of drug prescribing increased if the life events were perceived as uncontrollable by the subject. This suggests that health professionals' beliefs about the causes of a condition and patient responsibility may influence the resulting intervention. Furthermore, Marteau and Riordan (1992) examined nurses and doctors' attitudes towards patients who had not followed behavioural changes suitable for their condition and reported that no behavioural change was associated with more negative attitudes such as the patient was seen as less enjoyable to work with, less likely to understand about their condition and less likely to comply with any recommendations by the professional. This

again suggests that beliefs about responsibility are an important factor. However, although attributions for responsibility were implicit in this study they were not directly measured. The aim of the present study was to examine the influence of patient health behaviours on community nurses' beliefs about the patient and the relationship between these beliefs and treatment related interventions. In particular, the study examined the role of perceived patient responsibility in predicting nurse behaviour.

Methodology

Subjects

89 community nurses (58 health visitors and 31 district nurses, 86 female, 3 male) took part in the study ranging in age from 20 to 55 with most subjects aged in the 30-34 range. The subjects had a mean number of years since qualifying of 4.57 years.

Design

The study involved two conditions and comparisons were made between subjects. The subjects were randomly allocated to either the healthy behaviour (n=47) or the unhealthy behaviour (n=42) condition and were asked to complete a set rating scales after reading a case vignette.

Procedure

Subjects in the healthy behaviour condition were given a case vignette to read which contained information about a 59 year old man who had been discharged from hospital following a myocardial infarction. The subjects were told that they were to assess the patient and consider any relevant interventions. The vignette described how the patient had recently improved his

lifestyle prior to the heart attack in terms of stopping smoking, avoiding fatty foods, reduced alcohol intake and increased exercise, all following advice at an insurance medical. Subjects in the unhealthy behaviour condition were given a similar case vignette, but the patient was described as continuing his previously unhealthy behaviour following the insurance medical.

Measurements

1/ Attributions for illness

All subjects were asked to rate their patient in terms of the extent to which he i) would follow any advice you give him ii) could have prevented his heart attack. Subjects were then asked to state their view of the one major cause of the heart attack and to rate the extent to which the case patient iii) was responsible for this cause.

2/ Treatment interventions

Subjects were also asked to rate a series of interventions and asked to rate the likelihood that these would be included in their care of the patient. These interventions consisted of recommendations for behavioural changes (dietary fat, processed food, alcohol intake, smoking) and recommendations to join a self help group.

All ratings were made on a 7 point likert scale with a higher score reflecting beliefs that the patient was more likely to follow advice, that the heart attack was more preventable, that the patient was more responsible and that the subject was more likely to include the interventions in their treatment of the patient.

Results

The data were analysed to assess the effect of condition using ANOVA (SPSSPC). The means for the group differences are shown in Table 1.

- Insert Table 1 about here -

1/ Attributions for illness

The results indicate that subjects in the unhealthy behaviour condition rated the case patient as significantly **less likely** to follow any future advice ($F[1,86]=102.06, p<0.001$), rated the heart attack as **more** preventable by the case patient ($F[1,87]=22.41, p<0.001$) and rated the case patient as **more** responsible for the cause of the heart attack ($F[1,87]=14.37, p<0.001$) when compared to ratings by subjects in the healthy behaviour condition.

2/ Treatment interventions

The results suggest that subjects in the unhealthy behaviour condition reported that they were **more likely** to offer advice about behavioural change in terms of reducing dietary fat ($F[1,87]=5.75, p<0.01$), processed foods ($F[1,87]=3.94, p<0.05$), alcohol consumption ($F[1,87]=11.80, p<0.001$), and smoking ($F[1,87]=20.72, p<0.001$). However, the subjects also reported that they were **less likely** to advise the patient in the unhealthy behaviour condition to join a self help group ($F[1,87]=4.48, p<0.05$).

The relationship between attributions for illness and treatment interventions

The results also provide insights into the relationship between health professionals' attributions for responsibility and their interventions. A total score for interventions for behavioural change was computed by summing ratings for reducing dietary fat, processed foods, alcohol

and smoking. This was then correlated with ratings of case patient responsibility for the cause of the heart attack regardless of condition. The results showed a positive correlation between responsibility and professional intervention which focused on behavioural change ($r=0.224$, $p<0.01$) suggesting that if the subjects attributed the causes of the heart attack to the vignette patient (ie. the patient was perceived as responsible) the subjects reported an increased likelihood of recommending behavioural change.

Discussion

The aim of the present study was to examine community nurses attributions for illness, their treatment interventions and the relationship between these two variables.

The result suggest that nurses in the unhealthy behaviour condition rated their case patient as less likely to follow future advice, more responsible for their heart attack and rated the patient's heart attack as more preventable by the patient. This suggests that patients who do not show healthy behaviour generate more negative attitudes in health professionals and are perceived as being less compliant, and more responsible for their condition. This supports previous research which reports that patients who show behavioural change are regarded more positively than those who do not (Marteau and Riordan, 1992) and supports the prediction that negative attitudes from professionals are related to beliefs about patient responsibility.

The results from the present study also indicate that patient behaviour is related to professional intervention as nurses in the unhealthy behaviour condition stated that they were more likely to offer advice about diet, alcohol and smoking to their case patient. This suggests that patients who do not show self protective behaviour are subject to different health professional

interventions than patients who do and supports predictions that professional interventions are variable. The results indicate that patients who have not changed their behaviour are more likely to receive advice and information about behaviour change than those individuals who appear to have already attempted to adopt a healthy lifestyle. In addition, the results suggest that the case patient who had already changed their health related behaviours was more likely to be offered advice about joining a self help group. Perhaps patients who have changed their behaviour are regarded as self controlling and therefore more likely to benefit from a 'self help' perspective, whereas patients who have not changed their behaviour are regarded as needing a 'doctor-help' intervention from a professional.

The results also suggested that perceptions of patient responsibility for their heart attack were related to treatment interventions in terms of recommendations for behaviour change. This provides further support for the association between professional beliefs and the subsequent interventions and indicates that health professionals make attributions for the causes of a problem and that these attributions are related to their behaviour. However, the results conflict with theories of helping behaviour as the subjects in the present study showed increased recommendations for behavioural change if attributions for the causes of the problem was seen as internal to the patient. Perhaps if professionals perceive the individual as responsible for the problem, they are assuming that the cause is controllable and therefore recommendations for behavioural change are seen as a worthwhile intervention. It is possible that reduced intervention as suggested by theories of helping behaviour, is related to attributions of blame which is not necessarily comparable to responsibility, and that blame results in a more punitive professional response.

Early research into health professionals' behaviour suggested that the most important variable in the interaction between patient and professional was the patient's characteristics. For example, non-compliance and patient health behaviours were regarded as resulting from factors such as poor recall and patient health beliefs (Ley, 1981). However, the results from the present study suggest that analysis of the interaction between health professionals and patient should also consider the health professionals own beliefs as such beliefs may influence their decision making processes. This provides support for the promotion of research into health professionals beliefs and behaviours (Marteau and Johnston, 1990) and in addition, supports the emphasis on reflection and self analysis in the training of community nurses.

Table 1. Mean scores for beliefs about case patient and professional interventions

	Unhealthy beh. (n=42)	Healthy behaviour (n=47)
Beliefs about patient		
Follow advice	3.62 $\pm$ 0.96	5.55 $\pm$ 0.80*
Heart attack preventable	4.61 $\pm$ 1.09	3.51 $\pm$ 1.08*
Patient responsible	4.45 $\pm$ 2.07	2.85 $\pm$ 1.91*

Interventions		
Dietary fat	6.76 ± 0.62	$6.27 \pm 1.17^*$
Processed foods	6.17 ± 1.15	$5.64 \pm 1.34^*$
Alcohol	6.38 ± 0.88	$5.29 \pm 1.86^*$
Smoking	6.86 ± 0.52	$5.00 \pm 2.29^*$
Self help group	5.29 ± 1.57	$5.89 \pm 1.25^*$

* significant effect of condition.

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