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Shorter communication

An experimental investigation of the impact of biological and psychological causal explanations on anxious and depressed patients' perception of a person with panic disorder

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Abstract

It is often suggested that biological accounts of the cause of mental health problems are beneficial in health education initiatives. However, an alternative view is that the idea of a diseased brain may result in stigma and therapeutic pessimism in sufferers, professionals and the public with implications for the perception of unpredictability and risk. Anxious and depressed patients ($n = 49$) were randomly allocated to three experimental conditions. Prior to watching a video of a person suffering from panic disorder, participants were told either that research indicated that panic was caused by biological factors, by psychological factors or the cause was unclear (control condition). Those in the biological condition were significantly more pessimistic about the patient's prospects for recovery and rated risks as higher compared to those in the psychological condition. The results call into question the widely accepted practice of promoting biological/disease explanations of mental health problems.

Keywords: Panic disorder; Casual labelling; Health education; De-stigmatising; Experimental study

The grip of biological psychiatry on the mental health field was consolidated by the so-called "decade of the brain". Presented both as health/scientific education and an attempt to reduce stigma, mental health professionals, the general public and people with mental health problems were encouraged to focus on the biological basis of mental health problems (http://www.loc.gov/loc/brain/home.html). This programme:

> drew on the expertise of specialists and reported on progress in treating some of the most common brain disorders: "Depressive Illnesses"; "Schizophrenia"; "Developmental/Learning Disorders"; "Alzheimer's Disease"; "Anxiety Disorders."

Those advocating this position argue that biological disease models are de-stigmatising and empowering relative to psychological models. Promoting the view that mental health problems have biological causes has become an established part of many programmes with the declared intention of reducing stigma, such as that

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of the National Alliance for the Mentally Ill (1996). Note, however, that the promotion of biological factors is not necessarily in the best interest of those with mental health problems and their families. For example, genetic factors may be promoted (or over-promoted) as causal with little regard for the potential impact that such ideas may have (Rimes & Salkovskis, 1998). Biological accounts may have the unwanted effect of inducing pessimism regarding likely treatment outcome in patients, their carers and the general public. Attributing mental health problems to brain disease additionally affect the extent to which sufferers are regarded as unpredictable, potentially antisocial or even dangerous by and to themselves and others. The brain is commonly understood to be the organ of the mind and the "seat of the self"; a diseased brain could mean a diseased mind and self.

Some previous research has suggested that the biological view of mental health problems may not be as beneficial as it has hoped for in modifying public attitudes (Read & Law, 1999; Phelan 2002; Hinshaw & Cicchetti, 2000). In a previous experimental study, we have shown that, in a community sample, the suggestion of "psychological" but not "biological" labels resulted in more positive views of mental health problems (Lam, Salkovskis & Warwick, 2005). Mental health professionals are probably also susceptible to biological labelling effects, although this is more difficult to assess in experimental studies because professionals tend to have already formed strong views in this respect once they qualify; these attitudes may therefore be harder to modify. The importance of clinician's attitudes to causal factors in mental health problems lies both in their own expectations of patients' response to treatment (Lam & Salkovskis, submitted) and in the extent to which their causal beliefs are transmitted to patients. The way in which patients understand and accept such causal explanations may in turn affect not only their expectation of change but also their engagement and response in treatment. Understanding how causal labelling might affect patients with mental health problems is thus an important next step in research terms.

There is little experimental research which investigates the extent to which causal accounts (biological and psychological) influence patients' perceptions of mental health problems. However, ethical considerations make it difficult to justify manipulating patients' perceptions of their *own problems* as this may have an adverse impact on their subsequent treatment. The present study therefore examined the reaction of non-panic anxious patients to an experimental manipulation of causal labelling applied to a video recording of a panic patient (who is seen describing her experience of panic and anxiety as part of assessment for treatment). Prior to watching the video the patients were randomly allocated to one of three sets of "authoritative" information (explicitly linked to research findings) about the causes of panic, with ratings made after the video being the dependent variables. It was hypothesised that participants given a biological causal attribution for panic would have a more pessimistic view of the prospects for treatment of the person seen on video relative to both controls and those given a psychological account. A weaker prediction was the psychological attribution would result in a more positive view than the control account. In a previous study of mental health professionals, labelling a patient seen on video as suffering from "borderline personality disorder" (Lam and Salkovskis, submitted), affected their clinical judgement not only in terms of their ratings of likely outcome but also on ratings of likely therapeutic process (motivation to change). In the present study, it was considered relatively unlikely that patients would identify process factors of this type, and it was therefore predicted that labelling effects would be confined to outcome expectancies.

Method

Design

Forty-nine participants diagnosed as suffering from anxiety and depressive disorders were randomly allocated to one of the three experimental conditions prior to watching a video tape of a woman being interviewed about her panic attacks. All participants received the same background clinical details of the person's experience of panic, but *different* descriptions of the status of research about the presumed underlying cause of panic disorder. In the control condition the causes were described as not yet entirely clear; in the two other conditions, biological or psychological causes were invoked. Participants were asked to rate their impressions and expectations based *exclusively* on the section of video that they had watched.