Biopsychosocial incapacity assessments: a survey of occupational physicians’ opinions

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Introduction

Much of modern medical practice relies on a biomedical model to understand illness, disability and incapacity [1]. This model assumes that there is a good correlation between objective factors such as disease (underlying pathology) and impairment (objective loss of function) and the subjective aspects of illness (symptom level) and disability (reduced daily activities). It further assumes a good correlation between all these factors and occupational incapacity (not being at work). In reality, there is little meaningful correlation. It is increasingly recognized that the findings of medical investigations are not predictive of functional ability and that medical treatments which address pathology do not invariably improve incapacity. Despite apparent improvements in general health in the UK and an annual spend of nearly £100 billion on the NHS [2], 1 in 16 of the working age population are deemed to be too ill to work [3,4]. Of those who are incapacitated, approximately two-thirds have health conditions that are primarily subjective in nature while others with the same condition remain at work. This suggests that the individual’s perception of their condition is an important determinant of resulting incapacity [5]. In recent decades, a considerable body of research evidence has supported a move to a biopsychosocial approach, which recognizes the complex interaction of physical symptoms, psychological causes and responses and the patient’s overall social context in giving rise to incapacity [1]. A flags system has been developed to help understand the obstacles to overcoming incapacity [6] (Box 1). A competent assessment of incapacity requires a biopsychosocial approach. This survey was undertaken to establish whether there was any agreement regarding incapacity assessments in cases involving complex biopsychosocial factors.
Box 1. The flags system for identifying obstacles for returning to work

The flags are:

- Red flags refer to the presence of objective pathological change.
- Orange flags refer to the presence of a diagnosed psychological disorder.
- Yellow flags refer to individual factors. These are recognized to be the key determinants. They include erroneous thinking, low mood, avoidance behaviour and having an external locus of control (the latter is where the patient believes circumstances or their illness is in control of their predicament, rather than being in control themselves).
- Blue flags refer to factors in the workplace.
- Black flags refer to the overall context.

Box 2. Simulated case studies

- Case 1: a 42-year old firefighter had been knocked off his bicycle, resulting in a severe brain injury, confirmed by magnetic resonance imaging (MRI). The symptoms and signs were consistent with the injury. He was very disabled and had remained so for >2 years, with no meaningful improvement. Delegates were asked to vote whether he was permanently unfit to return to work.
- Case 2: a 52-year-old secretary had a long history of multiple sclerosis, with moderate impairment and disability. Despite this, she had been able to remain at work. However, conflict had developed within the team and she had subsequently requested ill-health retirement. Delegates were asked to vote whether she was permanently unfit to return to work.
- Case 3: a 37-year-old barwoman suffered a central scotoma in her right eye, resulting in a loss of 3D vision. Consequently, she kept smashing beer glasses on the taps and bumping into walls, spilling drinks. She had applied for income protection insurance as she deemed herself to be unfit for her normal role. Delegates were asked to vote whether they agreed with her.
- Case 4: a 44-year-old policeman had a 10-year history of intermittent low back pain. An MRI had revealed disc degeneration. He had undergone two bouts in the police rehabilitation centre and had briefly attended a pain management programme. Delegates were asked to vote whether he was permanently unfit.
- Case 5: a 45-year-old ward sister had been working 70-h weeks for many years. She had briefly attended a pain management programme. Delegates were asked to vote whether she agreed with her.

Methods

A presentation on the limitations of current medical practice on determining incapacity was given at the Association of Local Authority Medical Advisers (ALAMA) conference in March 2013. The presentation also explored some of the biopsychosocial concepts that are now considered important in the field of incapacity assessment. During the presentation, case scenarios were presented at various points, both before and after relevant theoretical concepts had been discussed. Delegates were invited to vote electronically as to whether they agreed or disagreed with the decision about fitness to work. Delegates could choose a ‘don’t know/not sure’ option to capture those where the delegate felt the question was ambiguous or that there was insufficient evidence to form an opinion. Early in the presentation, delegates were also invited to rate their competence in undertaking biopsychosocial assessments. Time constraints allowed no more than a superficial discussion of results at the time. Five cases were presented (see Box 2), based on real scenarios but with demographic data altered to protect anonymity. A ‘correct’ interpretation of each case is provided in the discussion, based on the author’s understanding of the biopsychosocial model (Table 1).

Results

Approximately 70 occupational physicians (OPs) were present, many of whom were accredited specialists. Two-thirds (67%; 46) of respondents agreed or strongly agreed that they were competent to carry out biopsychosocial assessments (Figure 1). Case 1 highlighted the impact of a permanent red flag on fitness to return to work. Seventy-three per cent (51) of respondents agreed or strongly agreed that the firefighter was permanently unfit to return to work. Case 2 highlighted how, despite the presence of red flags, the key issues in this case were individual and work factors (yellow and blue flags). Eighty-four per cent (60) disagreed or strongly disagreed that the secretary with multiple sclerosis was permanently unfit to work. Likewise, the aim of Case 3 was to illustrate how red flags were likely to be less important than yellow flags. Thirty-seven per cent (27) agreed or strongly agreed that the bartender with a scotoma was unfit for her normal role, 37% (27) disagreed or strongly disagreed and 25% (18) were undecided or unsure. Case 4 illustrated the difficulties of trying to understand back
pain from a biomedical perspective. Eighty-three per cent (60) disagreed or strongly disagreed that the police officer with back pain was permanently unfit. Case 5 was used to illustrate the difficulties of long-term incapacity caused by a subjective health complaint. Twenty-nine per cent (20) agreed or strongly agreed that the ward sister with chronic fatigue syndrome (CFS) was permanently unfit for her work. Sixty-six per cent (47) disagreed or strongly disagreed.

**Discussion**

In this study, two-thirds of participating OPs felt they were competent at undertaking biopsychosocial assessments with <10% stating they did not feel competent. For four of the five presented cases, there was broad consensus (66–84%) among the group which indicated agreement with the ‘correct’ opinion. Case 1 was designed to be a clear-cut, biomedical case of incapacity and while nearly three quarters agreed he was unfit, 10% did not agree. The cause of this may be imprecision in the wording of the question. If the question had asked for fitness to return to firefighting, the 100% expected agreement may have been achieved. Case 2 was intended to capture other factors that may influence incapacity. The individual had coped with a longstanding condition until she became involved in conflict at work. A large majority of physicians recognized the importance of yellow and blue flags and rejected her application. Case 3 was designed to highlight the importance of yellow flags. While the loss of 3D vision was a red flag and expected to have an impact on her work, simple adjustments could overcome this difficulty, for example using the other hand to position glasses correctly and prevent breakages. Delegates were equally divided, with 25% feeling further information was required before making a decision and this may have been due to the presence of a red flag, although this did not occur in Case 2. Case 4 captured the complexity of assessing permanence of incapacity due to musculoskeletal disorders. The majority of delegates did not consider the individual permanently unfit, but the question was potentially misleading, as it did not clarify that this was a lack of fitness for police duties rather than being unfit for all work. Case 5 was rejected for ill-health retirement by two-thirds of OPs. Many doctors struggle with CFS, because there is no clear underlying pathology [7]. In this case, there were potentially compelling reasons for supporting ill-health retirement as she was
very ill, very disabled and her condition had been stable for 5 years. However, she had not engaged with treatment (cognitive behavioural therapy, CBT) expected to be effective, since 50% of individuals receiving 13 sessions of CBT will return to full-time employment within 5 years [8].

There are a number of limitations to this study. The sample size of doctors was small and no effort was made to grade their seniority or qualifications. There was no randomization of selection, which therefore could have introduced bias. Given that most delegates appeared to use biopsychosocial concepts appropriately, there is a strong possibility that this might be an unusual group of doctors. C. J. Main, a professor of clinical psychology, stated over 10 years ago that ‘a competent biopsychosocial assessment is beyond most doctors’ [9]. It is unclear what has changed in the interim, particularly because there are no specific courses offering biopsychosocial training to doctors and competence is not defined. Additionally, the results did not undergo any formal statistical evaluation. This was a deliberate decision, to avoid any suggestion of inferring too much from the data. Bias may have been introduced during the presentation, as various concepts were introduced before the case discussions. This is likely to have had some influence on the voting. There may also have been some bias due to irrationality. Sutherland identified many reasons why humans fail to act rationally [10], including conformity (the desire to behave the same as one’s peers, with a fear of rejection if one does otherwise), group benefits (i.e. creating a sense of belonging) and that humans do not like being wrong, so that once a decision has been made, opinions become more extreme. It is possible that, given the nature of the presentation, delegates formed more robust opinions than they would in their routine clinical practice.

Following Dame Carol Black’s review [11], the Faculty of Occupational Medicine has been trying to help our speciality speak with one voice. Nothing is more important than OPs providing clear, consistent and evidence-based opinions regarding fitness to work. This survey demonstrates generally good agreement on a number of complex cases, and this seems higher than in 2004 [12]. However, it is unclear whether this was a very unusual group of OPs which appeared to be able to undertake competent biopsychosocial assessments, despite C. J. Main’s concerns. It is noteworthy that the Faculty of Occupational Medicine’s training handbook makes no reference to the need for OPs to gain competence in biopsychosocial assessments [13] and it is suggested that this is remedied as quickly as possible.

Key points

• Use of a biopsychosocial approach is required for competent fitness to work statements.
• In this survey of occupational physicians, there appeared to be good agreement in the assessments and with biopsychosocial principles.
• It is unclear whether these principles are more generally used in occupational medicine and, therefore, whether assessments are adequate.

Conflicts of interest

None declared.

References