REVIEW

Emotional intelligence and patient-centred care

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SUMMARY

The principles of patient-centred care are increasingly stressed as part of health care policy and practice. Explanations for why some practitioners seem more successful in achieving patient-centred care vary, but a possible role for individual differences in personality has been postulated. One of these, emotional intelligence (EI), is increasingly referred to in health care literature. This paper reviews the literature on EI in health care and poses a series of questions about the links between EI and patient-centred outcomes.

Papers concerning empirical examinations of EI in a variety of settings were identified to determine the evidence base for its increasing popularity. The review suggests that a substantial amount of further research is required before the value of EI as a useful concept can be substantiated.

INTRODUCTION

Many health care systems around the world are emphasizing a need for more patient-centred care.[1,2] Patient-centred care is a multi-dimensional concept which addresses patients' needs for information, views the patient as a whole person, promotes concordance and enhances the professional–patient relationship.[3] However, health care professionals vary in their ability to achieve an understanding of the patient perspective and provide patient-centred care.[4] One possible explanation is that individual differences in the personal characteristics of professionals may account for at least some of this variation.

Examination of the individual characteristics of health professionals and how they might relate to patient-centred care is a relatively new and under-explored approach. There seems to be no definitive answer as to how important any one such factor might be. There are many psychological approaches which might be taken, including an examination of personality traits, the idea of multiple intelligences which address areas beyond standard IQ, and the study of attitudes and beliefs.

Emotional intelligence (EI) is one such personal characteristic, and is increasingly referred to as having a potential role in medicine, nursing and other health care professions. It is suggested that EI is important for effective practice, particularly with respect to delivering patient-centred care.[6–13] Against this background, this paper explores what is meant by EI, reviews research on its utility, and discusses ways in which EI might be usefully applied in enhancing the quality of patient-centred care both directly and indirectly.

METHODS

A range of databases in several subject areas were searched to identify documents discussing EI. The current paper draws on published literature to inform a critical discussion of the area. Initial searches employed several databases, including Medline, Cinahl and Psych Info, using the term 'emotional intelligence'. Reference lists from identified papers were also hand-searched to identify any further literature which had not been identified in the initial searches. The searches were repeated at two points (July 2005 and July 2006) to ensure any newly published studies had been included. No study design or type of literature was excluded, as much of the literature regarding EI in health care takes the form of opinion pieces rather than empirical examinations of the application of EI.

FINDINGS

Empirical studies of EI in health care settings were few, with the majority of papers being editorials and opinion pieces. The six empirical studies identified are summarized in Table 1.

WHAT IS EI?

Although work conceptualizing EI was underway in the early 1990s, popular interest in EI arose from Goleman's *'Emotional Intelligence: Why It Can Matter More Than IQ'*, which suggested that life success depended more on the ability to understand and control emotions than on IQ.[14] As is often the case with psychological constructs, the use of a variety of terms makes it difficult to agree on an overarching definition of EI, and it has been referred to as emotional literacy, the emotional quotient, personal intelligence, social intelligence and interpersonal intelligence.[15] Perhaps one of the best and most circumspect definitions of EI is 'a set of abilities (verbal and non-verbal) that enable a person

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Table 1 **Empirical studies of EI in health care**

Author, year, country	*Participants*	*Sample*	*Measure used*	*Outcomes*	*Summary*
Wagner *et al.* 2002; USA	30 doctors; 138 patients	Faculty and residents in an academic family medicine department and their patients	Bar-On Emotional Quotient Inventory	Patient satisfaction	No significant relationship between global EI and satisfaction. No significant correlation between EI subscales and satisfaction. Significant difference between doctors with 100% satisfied patients and less than 100% satisfied patients on the happiness subscale of Bar-On (t=2.76, $P<0.01$)
Gerits *et al.* 2005; Netherlands	380	Nurses working with people with mental retardation and severe behavioural problems.	Bar-On Emotional Quotient Inventory	Burnout; job turnover	Complex analysis using groups clustered by EI profile and analysing male and female separately. In female nurses generally high EI did not provide a buffer against burnout; however, generally low scores were associated with higher burnout. Low social skills seemed to protect against burnout. In male participants problem solving and stress tolerance EI scores were related to better personal accomplishment (low burnout)
Humpel and Caputi. 2001; Australia	43	Mental health nurses	Mayer *et al.* Multifactor EI Scale	Work stress	No significant association between EI and stress. Lower EI scores in female nurses with less experience in mental health but not in male participants.
Pau and Croucher. 2003;UK	213	Dental students	Schutte EI Scale	Perceived stress	Higher EI was associated with lower perceived stress. However only the sub scale of optimism/ mood regulation predicted perceived stress.
Wagner *et al.* 2001; USA	Not stated	Medical students	Bar-On Emotional Quotient Inventory	Not stated	On-going work

EI, emotional intelligence

to generate, recognize, express, understand and evaluate their own and others' emotions in order to guide thinking and action and successfully cope with environmental demands and pressures.'[16]

Some view EI as a fixed and stable personality trait which is measured using self-report questionnaires of typical behaviour, others see it as a more dynamic personal quality measured using maximal performance measures which quantify actual performance. An example of this would be the difference between asking someone about their problem solving approach and giving them a problem to solve. A self-report format can be open to manipulation through learned or faked responses. However, the validity and reliability of these measures is more established than maximal performance measures, which are less open to faked responses but whose consensus scoring has been criticized for being subjective.

The fact that this conceptual distinction exists has generated much discussion on how best to measure EI and somewhat complicates the comparison of the few empirical studies that have been conducted. Matthews *et al.*[17] have suggested that different measures of EI quantify different things, and in addition that the correspondence between different versions of scales demonstrates lower correlations than would be expected. Perez *et al.*[18] have suggested that trait EI instruments measure emotional self-efficacy while ability measures of EI measure cognitive-emotional ability.

WHAT IS THE EVIDENCE BASE FOR EI?

Outside of health care, EI has been widely cited as an attribute which can improve the quality of work and increase productivity and personal and organizational success. In the small number of empirical evaluations that have been undertaken, the emphasis is on predicting academic or work-related outcomes. In education, for example, EI has been positively associated with academic success[19,20] and low EI with deviant behaviour, drug taking, alcohol abuse and poor relationships with friends.[21,22] In more general settings EI has been associated with life satisfaction.[23–25] While some of these studies address causal relationships, looking at EI as a predictor of future outcomes, the majority examine EI in cross-sectional studies. A lack of longitudinal work to substantiate any claims for outcome improvement resulting from either selection incorporating EI measures or training in EI

presents a significant limitation to any conclusions regarding its predictive power as a construct.

While the evidence for applications of EI in real world settings is sparse, there is some work which suggests EI may be related to job performance and satisfaction.[26,27] EI has also been linked with enhanced ability to identify emotional expressions, higher ratings of social support and satisfaction with social support, more effective mood management,[28] better adaptation to stress[29] and better social interaction.[30]

Landy has recently published a critique of the EI construct in organizational research. [31] He suggests that while proponents of EI make a number of claims for the value of EI, the scientific method applied to systematically investigating the links between EI and dependent variables is flawed. The claims for the value of EI seem to be inversely proportional to the actual availability of published, peer reviewed evidence.[32] For example Goleman, who popularized EI, provides conclusions based on proprietary data which are unavailable to others to analyse, with no presentation of inferential analyses to support his conclusions for the compelling value of EI.[31]

A differing position is taken by the authors of the only meta-analysis of empirical studies of EI that we found. The authors included 69 independent samples within 57 studies which examined the link between EI and performance. The results suggested that, potentially, EI is a construct which does have value and is worthy of future research. It also suggests that EI should indeed be considered 'a valuable predictor of performance.'[16] Further conclusions are that while EI does appear to be to be correlated with measures of personality, it seems to be a better predictor of personal performance than personality measures. There was no evidence to support the claim, made by some, that EI is more important than general IQ.

The strength of evidence for the value of EI can seem either overwhelmingly conclusive (from researchers such as Goleman) or very weak (from some of the harshest critics of EI, such as Landy and Conte).[31,33] Some proponents seem to have whole-heartedly—if perhaps prematurely—embraced EI within their selection, recruitment and training procedures to enhance the effectiveness of their workforce.[34] Whilst such an approach may be premature, there are indications that further investigation into EI may provide interesting insights into a variety of variables, including job performance and psychosocial outcomes, both of which may impact on patients in the case of health care.

EI IN HEALTH CARE

Whilst there has been a recent increase in the discussion of EI in health care literature, most of the references are based on unsubstantiated claims of the theoretical importance of EI and assume that EI is a quality that can be altered or improved. However, there is a small but growing empirical literature which suggests that there may be a role for EI in the health care setting.

If we are to determine whether there is a role for EI in health care, it must be rigorously evaluated where its value is hypothesized. The state of the current evidence base suggests that there are a number of questions which need to be posed before any conclusions as to the usefulness of this construct can be reached. Based on our understanding of the construct of EI and the way in which it has been employed in non-health settings, we addressed the strength of evidence for the relationship between EI and four areas which would seem to be important questions for health care.

(1) How EI in health professionals might impact on patient-centred care, patient satisfaction and quality of care;
(2) How EI might impact on issues of job satisfaction and performance;
(3) Whether EI training for health professionals may impact on personal as well as patient-centred outcomes;
(4) Whether measurement of EI should be part of the selection and recruitment process for health care professionals and students.

EI AND PATIENT CARE

Most complaints about doctors relate to poor communication, not clinical competence, and improving communication in health care is a current area of interest in policy and practice. Given the emphasis on insights into one's own and others' emotions that are described by models of EI, it might be offered as an explanation for why some practitioners appear to be better at delivering patient-centred care than others.[35] Assessing and discriminating patient's emotions could have an impact on the quality and accuracy of history taking and diagnosis. In addition, if clinicians are able to understand patients' emotional reactions to prescribed treatments or lifestyle advice they may be better able to understand why some treatments are more or less acceptable to some patients. The ability to manage and read emotions would seem to be an important skill for any health professional and might potentially enhance patient-centred care, improve the quality of the professional-patient relationship, and increase patient levels of satisfaction with care and perhaps even concordance.

Only one study directly examined the impact of EI in practitioners on outcomes relevant to patient care, and it reported only a limited relationship between physician EI and patient satisfaction.[36] They administered an EI measure to 30 residents in an academic family medicine department. Only the EI sub-scale of happiness in the residents showed any relationship to satisfaction in the patients they treated.

EI AND JOB SATISFACTION AND PERFORMANCE

Given that EI is hypothesized to be important in recognizing and processing our own as well as other people's emotions, higher EI could impact positively on job satisfaction and performance. For example, there can be tensions from many spheres of practice—from the macro (organizational) to the micro (patient/colleague)—which can produce feelings of frustration and anger. Being better equipped to recognize and manage such feelings may allow practitioners to experience fewer incidents of job related stress. Health care practitioners who are disillusioned, over-stressed or burned out are unlikely to be able to deliver good quality care and communicate well with patients.

Three studies have examined relationships between EI, work stress and burnout in health care professionals. One reports the added value of considering the EI of subjects in connection with levels of stress. They described a link between EI and burnout in nurses measured at two different points in time.[37] In a similar study of work stress, no direct relationship between EI and work stress was identified, but nurses with more job experience had higher levels of EI.[38] In the third study, low EI was associated with higher perceived stress in dental students.[39]

While the above studies have begun to examine relationships between EI and stress and burnout in individuals, such problems occur within the context of the health care organization. A wider approach to this area may need to examine the organizational culture in which health care is delivered and whether an organization can operate in an emotionally intelligent way to reduce stress and burnout. There is a body of literature which discusses EI at the level of the organization. However, as with the individual-focused research, there is no definitive evidence linking EI to organizational performance.

TRAINING AND HEALTH CARE CURRICULAE

The idea that individuals can be trained to be more emotionally intelligent is one which is discussed with enthusiasm in nursing management literature. It could be hypothesized that increasing EI in individuals employed in health care may lead to more effective management and better functioning teams of professionals, in addition to direct benefits for patient care. However, assessing the value of training in EI poses a number of challenges.

It is unclear how responsive to training EI is. Some of the models suggest competencies which can be developed with training, while other conceptualizations describe personality characteristics which are difficult to change—with the implication that EI cannot be significantly influenced by training. In addition, it is unclear whether current measures are sensitive enough to detect changes over time in response to training.

There is little formal evaluation or description of training programs which may improve EI in health care professionals. Wagner *et al*.[40] described the administration of the EQi (a self-report trait measure of EI) to medical students[41] which they hope to follow up at two and three years into training after an intervention to where EI scores are fed back to students with reflection and discussion.

If EI is conceptualized as an ability that can be learned and changed, it could be a useful way of thinking about and addressing aspects of the doctor–patient interface which work less well. However, before widespread recommendation of and training in EI is suggested, we need to be able to measure it reliably in order to determine whether it explains differences in the quality of care. There is still an important debate taking place about how much variability in practitioners can be explained by EI over and above what can be explained by other more established qualities such as empathy and self-awareness.

Currently we would argue that in order to better understand any possible impact of EI on patient care, there is a need for a longitudinal examination of EI in health care professionals.

RECRUITMENT

Selecting the 'right' students for training as health care professionals is the subject of much study and debate. What constitutes 'right' is complex, but recruiting students who will complete training and become professionals who help deliver high quality care would seem to be an important criteria. Despite the warning by some authors that EI has no added value above current ability and personality measures in the area of job selection and performance,[17] there are many opinion pieces, in nursing literature in particular, that cite the value of recruiting emotionally intelligent individuals.

The selection of medical students in particular is problematic, as medical schools are faced with large numbers of applicants with uniformly high academic achievement and no formalized way of selecting students who will become practitioners capable of delivering high quality patient care. If prospective examinations of EI find that it has a hypothesized impact for patient care but is unresponsive to training, medical school selection methods may need to include measures of EI.

One empirical study developed a proxy measure of EI which the authors suggest is able to identify medical students oriented to the social sciences and humanities, with the aim of improving the selection procedures in their medical school (which promotes both biomedical and social scientist and humanist perspectives).[42] However, there is little guidance as to whether students should be screened for EI at admission to medical school.

As in other areas there is currently a lack of definitive evidence concerning the value of using EI to help inform the recruitment of health professionals to training programs or jobs.

DISCUSSION

There is an increasing interest in the construct of EI. The construct has certain face validity and despite little empirical work is proving attractive in many areas, including health care, where the search for abilities and characteristics which can improve the patient-centred qualities of health care professionals and ways in which we can improve training goes on. However, on the basis of the literature we have reviewed it would seem a pity if EI were to be accepted as unquestioningly in health care as it has been in other settings.

The construct of EI is not without its critics and problems. There are difficulties in agreement over its conceptualization—whether it is a dynamic quality which can be trained or improved, or a more fixed personality trait. There is little published empirical work and much of the data that are collected are held in proprietary databases which are not available for independent scrutiny. All of these problems make comparison of the few studies available difficult, and critics of EI suggest that these problems are sufficiently serious to make the construct of EI irrelevant and unusable; however, there are others who, whilst recognizing the problems, nevertheless feel the construct has sufficient promise to merit further attention but call for careful scientific study and caution the claims for its use until further work is done. It would seem premature to discount EI as a useful tool for health care settings completely, but it does require a rigorous examination before any real claims about its utility can be made.

While these limitations may seem damning to the construct of EI and its future use, similar debates have taken and still take place in the measurement of many psychological constructs, including standard intelligence (IQ) and many other measures of ability and personality, and EI is therefore not unique in having such criticisms levelled at it. For example, some may argue that empathy is a skill which can be developed and is one of the aims of medical school curriculae which stress patient-centred care. Others may suggest that empathy is inherent in personality and a core characteristic of a person which is unresponsive to training and education. In reality, the likelihood is that for both empathy and EI the truth may lie somewhere in the middle, with contributions from personality, the culture of the health care organizational environment and personal life experience.

In order to examine whether EI might have any impact on patient care, we would suggest five broad areas of investigation which need to be addressed in order to confirm whether the construct of EI has any utility in health care. The order of the questions suggests a programme of research and the order in which this program might be approached, although certain questions will overlap. The first two questions address issues of methodology and subsequent questions are more concerned with the clinical applications of EI.

What do we measure when we measure EI?

What do we measure when we measure EI and are we measuring something different from personality or other established attributes such as empathy? It is unclear what EI's relationships to personality or social factors might be and whether other more established and available measures already capture the same concept by a different name.

How do we measure EI and when?

There are several robust scales available for measuring EI but due to the expense and regulations for their use many people use proxy measures or develop their own scales. It will be necessary to establish the best measures available and determine at which points in time their use is required. Such measures would also need to be made readily available to the NHS.

Do levels of EI in health professionals make a direct difference to patient outcomes?

Our review has found that there is almost no evidence as yet that EI has significant implications for patient care. In order to determine if this is a construct that will have the impact on health care that some believe, it is essential to investigate it systematically. Some people do seem to be more able to deal with their own emotions and those of others, but we need to determine what impact, if any, this might have on the quality of their care.

Does EI have an impact on the health professional and their working environment?

In addition to examinations of EI in individuals is the interesting concept of the emotional culture of the organization within which they practice. The impact of organizational context on the emotions and personality of the workforce may have implications for the institutional professional culture, which may in turn impact on the emotional sensitivity of health care students and subsequently on patient care.

There are also claims that individual training in EI can improve team working[27] and impact on burnout and stress. If this is so, can EI training improve outcomes for health professionals (such as retention, burnout and stress and

communication between teams and individuals) and in turn have a subsequent effect on patient care?

To what extent can EI be developed or taught?

If levels of EI affect patient-centred outcomes then it will be important to determine whether EI is a fixed quality or a more dynamic ability which is amenable to training. If it can be improved with training then what kind of training is effective? If the construct appears more trait-like, then the clinical professions will need to confront a more difficult issue of whether selection needs to take account of an individual's EI. There is some work already ongoing in this area and an interesting approach taken by one team of researchers suggests that the learning of EI should be seen as something which is developed within a community of health care practitioners. As a consequence, it is argued that EI should be seen as a more dynamic quality which emerges from the process of sensitive and intelligent problem solving, rather than the sum of individuals' EI.[43]

CONCLUSIONS

While EI is an appealing prospect to some, its benefits to clinical practice, education and selection in any health care discipline have yet to be adequately explored. We have only recently begun to explore the possibility that EI may be of benefit to either the professional or the patient. Given the paucity of rigorous research in other disciplines, a more cautious approach should perhaps be adopted to the investigation of this individual difference in managing emotions and its impact on health care.

EI training in the business community is a lucrative business, and testing using current instruments is expensive and complex. Without the empirical evidence to support the idea that many health care outcomes can be improved by increasing EI in health care professionals, widespread adoption of programmes to increase EI should not be considered.[7] The questions posed here call for a systematic examination of the role of EI in health care rather than the uncoordinated scattered approach which is currently evident.

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