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The influence of narrative medicine on medical students' readiness for holistic care practice: a realist synthesis protocol

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ABSTRACT

Introduction Holistic healthcare considers the whole person—their body, mind, spirit and emotions—and has been associated with narrative medicine practice. Narrative medicine is medicine performed with narrative skill and has been offered as a model for humanism and effective medical practice. Narrative medicine interventions have been associated with physicians' increased empathy and more meaningful interactions with patients about managing their illness and preventative medicine. However, while there is some evidence that certain groups are more open to narrative practices (eg, traditional vs Western medical students), the extent to which narrative medicine interventions during undergraduate medical education impacts on students' readiness for holistic care, as well as the underlying reasons why, is unknown.

Methods and analysis Realist review is a theory-driven approach to evaluate complex interventions. It focuses on understanding how interventions and programmes work (or not) in their contextual setting. This realist synthesis aimed to formulate a theory around the influence of narrative medicine medical students' readiness for holistic care practice. We will follow Pawson's five steps: locate existing theories, search strategy, study selection, data extraction, data analysis and synthesis. We will use the following electronic databases: Web of Science, Medline, Scopus and Embase. Articles between January 2008 and September 2018 will be included. Results will be written according to the RAMESES (Realist And Meta-narrative Evidence Syntheses: Evolving Standards) standard for reporting realist syntheses.

Ethics and dissemination Ethics approval was obtained from the Chang Gung Memorial Hospital for the wider study. The findings of this review will provide useful information for academics and policymakers, who will be able to apply the findings in their context when deciding whether and how to introduce narrative medicine programmes into medical students' curricula. We will publish our findings in peer-reviewed journals and international conferences.

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Strengths and limitations of this study

- This study is one of the first to examine preparedness for holistic care as an outcome to narrative medicine interventions.
- The use of a systematic approach to identifying the literature around outcomes relating to holistic care arising from narrative medicine interventions is a study strength.
- The application of a realist approach to understanding the contexts in which narrative medicine prepares different types of students for holistic care practice, and how, is another strength.
- One concern for this study is that there might be a limited number of studies that have examined holistic care and its associated components as an outcome to narrative medicine interventions.
- One further concern is that the reporting of narrative medicine intervention outcomes might predominately focus on reactions to the intervention rather than provide deeper understanding of the mechanisms that might promote/inhibit holistic care.

BACKGROUND

Holistic healthcare is a form of healing that considers the whole person—body, mind, spirit and emotions—in the quest for optimal health and wellness.[1 2] It is essentially synonymous with Engel's biopsychosocial model.[3] The biopsychosocial approach to illness comprises four systems within the person: the organs, the whole person, behaviour and social roles. There are also four contextual factors that influence these systems: personal factors, physical environment, social environment and time.[2] Holistic care asserts that the patient is a person, not a disease. Thus, treatment involves treating the underlying cause of the condition rather than just alleviating the symptoms.[1 2]

Recent research has identified individual attributes of clinicians that are optimal for providing holistic care. For example, key personal attributes such as sociability, compassion, respectfulness, patient centredness and sensitivity are all thought to facilitate holistic care provision.[4] Furthermore, being able to identify and to satisfy patients' needs has also been identified as a motivational factor that enable healing relationships with patients to develop, thereby encouraging an holistic

care approach.[4] Finally, having the foresight and ability to facilitate autonomy and self-confidence in patients, to support individuals in obtaining relevant information about their condition and to enhance effective communication all contribute towards individuals' sense of empowerment around making medical treatment decisions.[5 6] As such, providing holistic care means understanding how an illness affects the whole person and how to respond to their specific needs.[7]

However, the development of a holistic approach to care is not straightforward. For example, in recent years, medical schools across the world have become increasingly concerned around the issue of empathy decline in their students,[8 9] especially during the clinical years.[10] This is possibly due to students' reactions to so-called *professionalism dilemmas*: situations in which medical students witness or participate in something they believe to be unethical, unprofessional or 'wrong'.[11 12] Common professionalism dilemma events for healthcare students that give rise to conflicts between their formal professionalism learning and what they witness during work-based placements include student abuse, patient dignity and safety issues.[12 13] While experiencing such situations may lead some students to strongly reject these negative role models, it can also lead to diminishing empathy and professional identity disruption.[14 15] Thus, medical schools are seeking ways to design more effective curricula to cultivate positive character development and professionalism in their students. Indeed, more broadly, the medical humanities, which includes narrative medicine, has been heralded as a remedy to experiences of negative role modelling and has been thought to facilitate compassionate care.[16–18]

Narrative medicine and holistic care

According to Rita Charon, a major proponent of narrative medicine, narrative medicine refers to clinical practice that is fortified by a narrative competence.[19–21] Narrative medicine is thought to enhance the attributes of healthcare providers to facilitate the delivery of holistic care practice. In particular, it has been promoted as a way for physicians to understand the personal connections between themselves and their patients[20]; to help them to recognise, interpret and be moved to action by the problems of others[21]; and to provide new opportunities for greater learning about respectful, empathic and nourishing medical care.[22–24] The narrative concept therefore has been advocated as a framework for practice and proposed ideal (holistic) care while providing the means to gain competence. It is unsurprising therefore that medical schools around the world have introduced narrative medicine as part of their medical humanities programmes in their undergraduate curricula.[18]

Evidence for the benefit of narrative medicine interventions suggests that it can enhance empathy, observational skills, emotional awareness, communication skills, deepen critical thinking and reflective practice, and other factors associated with holistic care.[18 25 26] Furthermore, a systematic review of the literature on narrative medicine has found the outcomes for patients to be efficacious in terms of decreasing pain; increasing well-being (related to illness), confidence and cooperation; and decreasing stress and feelings of alienation.[27] Additionally, narrative medicine educational interventions are not always efficacious. Indeed, recent research has begun to unpack the differential engagement and outcomes across study cohorts. For example, when considering the outcomes of a narrative medicine course in Asia, students on a Chinese medicine track reported greater emotional, reflective and self-development outcomes in comparison with students on a Western medicine track.[28]

As we can see, despite the appearance of a link between the desired outcomes of a narrative medicine course and requirements for holistic care practice, evidence is inconclusive. Additionally, to date, no direct evidence unpacking the underlying processes for this potential link has been provided; thus, prior research draws on elements of holistic care to make their assertions (eg, empathy) without illuminating the contexts and mechanisms through which this might have come about. Therefore, understanding the underlying mechanisms that enhance such an outcome of narrative medicine programmes, alongside the necessary conditions for them doing this, is crucial for curriculum designers (the beneficiaries of this research).

To our knowledge, this is the first systematic review to focus on the impact of a narrative medicine intervention on medical students' preparedness for holistic care, with the explicit aim of unpacking the 'black box' of the intervention itself, by asking the following broad research question: under what circumstances and for whom does a narrative medicine intervention in an undergraduate medical curriculum influence medical students' readiness for holistic care?

REALIST REVIEW METHODOLOGY

Realist review is a theory-driven approach to evaluate complex interventions that focus on understanding how interventions and programmes work (or do not work) in their contextual setting; so, rather than simply measuring outcomes, it explains why interventions work.[29–32] Standard systematic reviews focus on measuring and reporting on the effectiveness of a programme, but provide little or no clues as to why the intervention works or not when applied in different contexts, deployed by different stakeholders or used for different objectives.[33] Thus, realist reviews attempt to explain 'How does it work?', 'Why does it work?', 'For whom does it work?' and 'In what circumstances does it work?'[33] Furthermore, standard reviews follow a relatively straightforward formula whereby databases are searched systematically in a uniform manner. However, realist reviews have an iterative approach to searching the literature: having developed an initial search of the core literature, further searches of other literature can be undertaken in the pursuit of other 'lines of enquiry'.[34]

The hallmark of a realist methodology is the generative model of causality: to infer the outcome(s) (O), there is a need to understand the underlying mechanism (M) that connects to the context (C) in which the intervention occurs.[33] Realist methodology does not assume a linear causal relationship but attempts to explain complex interventions through programme theory.[35] As the name suggests, it is an approach grounded in realism,[29] a school of philosophy asserting that both the material and the social worlds are 'real', that they can have real effects on stakeholders and that it is possible to work towards a closer understanding of what causes change. Realist methodology belongs to a family of theory-based evaluation approaches. It is used to evaluate the impact of an intervention through three key elements and their complex interactions: the *context* in which reality unfolds, the *mechanisms* that trigger the *outcome* following the intervention (or C–M–O model).[32]

There are, of course, limitations to realist reviews. For example, it is intellectually challenging and there is no simple 'formula' as with more traditional systematic reviews. It also requires advanced theoretical understanding drawn from the social sciences, and competencies to design research questions suitable for a context–mechanism–outcome analysis.[29–32] Despite these limitations, we believe that a realist methodology can facilitate our understanding of the interplay between contexts and mechanisms that might facilitate or inhibit students' readiness to undertake holistic care (the desired outcome).

MAIN RESEARCH QUESTION

The research question in this study is as follows: what are the contextual factors (including traditional and Western medicine contexts) of narrative medicine interventions and the underlying mechanisms that impact on medical students' readiness for holistic care practice?

REVIEW AIM AND OBJECTIVES

The study aimed to identify the impact of narrative medicine interventions during undergraduate medical curricula on medical students' readiness to deliver holistic care in order to develop a programme theory (a theoretical model) of what works, for whom and why.

Objectives:

1. To explore how a narrative medicine intervention can facilitate medical students' readiness for holistic care.
2. To develop a programme theory that explains how narrative medicine interventions can facilitate holistic care.

METHODS

The study design was based on Pawson's five stages (figure 1).[33]

Stage 1: locate existing theories

We will begin by identifying the relevant theories associated with narrative medicine and its influence on holistic care practice to develop our initial programme theory around how narrative medicine might influence students' readiness for holistic care practice. This stage involves identifying potential theories by searching the relevant literature to facilitate our understanding and theorising about *how* narrative medicine might influence students' readiness for holistic care practice in different contexts. This involves a search using electronic published resources (Web of Science, Medline, Scopus and Embase), as well as books. The search will comprise a scoping search, which will be developed using search terms focused on the intervention (eg, narrative medicine, narrative-based medicine, narrative medical, narrative training and parallel charts) and the outcome (eg, preparedness or readiness for holistic care and attributes of holistic care practitioners). Books and articles will be examined, and any identified theories will be used to build up the initial programme theory. This initial theory will be examined against the studies included in the review. This stage has already begun, and so far we have identified the biopsychosocial theoretical perspective and are examining research around facilitators and barriers to *becoming* biopsychosocial.

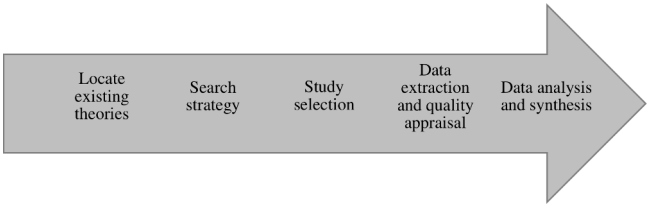

Figure 1 Five stages of a realist synthesis study design (from Pawson).

Step 2: search strategy

The second stage involves developing our search strategy that will essentially comprise two phases. We will begin by searching the Web of Science, Medline, Scopus and Embase databases to find relevant articles for the study. The search terms will be developed, tested iteratively and discussed across the research team (see online supplementary appendix 1 for our initial progress). During the second phase of searching, we will seek additional relevant documents for testing and refinement of our programme theory, which may come from grey literature (eg, policy documents, conference proceedings and other works not necessarily subjected to peer review).

Step 3: study selection

During the searching process, titles and abstracts will be imported to EndNote and screened using the inclusion and exclusion criteria below.

Inclusion criteria:

- Date range: articles between 1 January 2008 and 10 September 2018.
- Population: medical students (clerks and interns) and medical teachers (trainers and educators).

- Focus: narrative medicine interventions, holistic care (and its components) and patient centredness.
- Outcome: holistic care practice (and its components).
- Language: English and Mandarin.
- Geographic location: any.

Exclusion criteria:

- Date range: articles outside our date range.
- Population: other healthcare students, other healthcare teachers, non-healthcare students and non-healthcare teachers.
- Focus: other medical humanities aspects, narrative data outside of narrative medicine interventions.
- Language: other than English and Mandarin.
- Geographic location: no exclusions.

Step 4: data extraction and quality appraisal

In realist reviews, data extraction of the selected studies comprises a number of phases. First, we will use a data extraction form to record study details: basic information (author, title and year of publication), document details (aim, design, method and findings), population and intervention.[35] At this point, we will take our selection of articles for the programme theory development and appraise them for their relevance and rigour, marking them up as conceptually rich (high), moderate and low. All documents that are deemed to contribute to theory testing and refinement will also be assessed for credibility and trustworthiness.[36] Here we will consider the quality of arguments and theory use, not just at the level of the data, which will enable us to draw on relevant manuscripts for our programme theory development.[37]

Following this, we will identify initial contexts, mechanisms and outcomes for the programme theory development. This will be undertaken in collaboration with the team. Each team member will read a subset of the articles individually before discussing our individual findings in a group. A list of contexts, mechanisms and outcomes will be developed, with full descriptions. All data (identified articles) will be imported into the software ATLAS.ti V.8 and coded accordingly. New contexts, mechanisms and outcomes will be developed throughout this process as and when they are identified.

All data extraction will be undertaken by one reviewer, and the extracted data will be reviewed by the other team members regularly. Any differences in opinions will be discussed during project team meetings and agreements on any new codes will be made together.

We will follow the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines to improve the conduct of systematic reviews and the quality of the protocol (see online supplementary appendix 2).

Step 5: data analysis and synthesis

Data analysis from step 4 will be synthesised to refine the programme theory, which will identify the contexts and mechanisms that are key for students' readiness for holistic care practice, highlighting what works for whom and why. Specifically, we will infer the mechanisms that trigger the desired outcomes.[35 38]

These findings will be systematically considered in order to test and refine the programme theory using the following conceptual tools[39]:

- Juxtaposing: when the study provides process data to understand the outcome model mentioned in another study.
- Reconciling: identification of the differences between contradictory sets of findings.
- Adjudicating the data: quality consideration between research.
- Consolidating: inference of a mechanism for a different outcome.
- Situating: explanation of differing outcomes of intervention and completion of the context–mechanism–outcome configurations.

The results of the synthesis will be written according to RAMESES standards for reporting realist syntheses.[36]

Patient and public involvement

This protocol is a systematic review to focus on the impact of a narrative medicine intervention on medical students' preparedness for holistic care; thus, this research did not involve patients and public involvement.

Ethics and dissemination

Ethical approval for the wider study (including qualitative interviews at stage 2, not included in this protocol) was obtained from Chang Gung Memorial Hospital (201 601 857B0C601). This study will draw from published literature to describe context–mechanism–outcome configurations regarding how narrative medicine interventions impact on medical students' readiness for holistic care practice. By identifying the causal mechanisms around the influence of narrative medicine interventions on holistic care practice readiness, it may be possible to design narrative medicine programmes that are effective for specific medical students across different cultural and organisational/curriculum contexts. The findings of this review will be submitted for publication to key medical education journals, core international medical education conferences, as well as offered for download as a 'top tips' resource via our research centre website in order to provide useful information for academics and policymakers, who will be able to apply the findings in their context for the improvement of medical students' learning.

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Competing interests None.

Patient consent for publication Not required.

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