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Title: Trust in the health care provider-patient relationship: A mapping review of the evidence base

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ABSTRACT

Purpose Trust is a fundamental part of the health care provider-patient relationship with important implications for both parties. The aim of our mapping review was to characterise the current evidence base on trust in the patient-provider relationship in order to identify new directions for trust research.

Methods We searched medical and social science databases from 2004 onwards using text and subject heading keywords relating to "trust" and "health care" and "relationships". We identified abstracts summarising empirical studies carried out in health care settings that either examined trust between patients and providers or focused on other health care issues but reported on trust among their findings. Two review authors assessed the relevance of abstracts and extracted data relating to year published, country of study, clinical specialty, study method and perspective of study.

Results 596 eligible abstracts were identified. Most reported on studies carried out in the USA, in family care and oncology or palliative care settings, using questionnaires and interviews to elicit patients' perspectives. <5% of included studies reported providers distrusting patients in their abstracts and only one of the 596 explicitly set out to examine providers distrust of patients.

Conclusions Providers' trust of patients remains a neglected area on the trust research agenda. Empirical studies examining the factors that influence provider's trust/distrust in

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patients and how this might affect the consultation and patient health-related behaviours are urgently needed to readdress this imbalance. The potential of ethnographic methods in this area is underexploited.

INTRODUCTION

The concept of trust is predominantly associated with situations of uncertainty and risk, relations of dependency between experts and non-experts, and expectations about future behaviour/interactions. The asymmetric provider-patient relationship in health care is therefore a prime example of what has been called a 'trust relationship'¹ where trust acts as one means of bridging the uncertainty in the encounter².

The essential role that trust plays in effective doctor-patient relationships has been long recognised³. Trust has been shown to be a critical factor influencing a variety of important therapeutic processes including patient acceptance of therapeutic recommendations, adherence to physician recommendations, satisfaction with physician recommendations, satisfaction with medical care, symptom improvement and patient disenrollment³. Trust, as this evidence suggests, is important for patients and may be used as a quality indicator and as a potential 'marker' for how patients evaluate the quality of health care⁴. However, in their systematic review conducted in 2004⁵, Calnan and Rowe caution that evidence to support the claims about the impact of trust on therapeutic outcomes is in short supply, mainly because of the lack of intervention studies or quasi-experimental studies and in contrast to the sizable literature assessing trust from the patient perspective studies examining either the value and impact of trust from the provider perspective are very limited⁴. However the need for mutual, interpersonal trust appears to be important, not least because of the so called shift in the structure and nature of the clinician-patient relationship away from paternalism towards shared-decision making with an emphasis on patient involvement and self-care and conditional and earned trust rather than assumed or

blind trust⁴. The extent to which clinicians trust their patients (felt trust) may influence how they treat and manage (enacted trust) which could in turn influence how patients respond and have consequences for subsequent, disclosure and adherence) ².

The aim of this review was to characterise the evidence base on trust in the health care provider patient relationship in order to see if, and how, the perspectives and focus of trust research may have changed since the Calnan and Rowe review in 2004, and to identify new research directions.

METHODS

Mapping Review

A systematic mapping review is “a defined method to build a classification scheme and structure a....field of interest” ⁶. This type of review does not aim to provide an overview of study findings or synthesise evidence, rather it involves a search of the literature to determine what sorts of studies addressing the systematic review question have been carried out, where they are published, what sorts of outcomes they have assessed, in which populations⁷ and using which methods. A mapping review is particularly appropriate where there is an abundance and diversity of research and are often used to identify gaps in research literature from which to commission further reviews and or primary research⁸.

Review Question

In order to address the wider scope of this type of study, a mapping review question is necessarily much broader than that of a traditional systematic review⁹. We used the SPICE framework ¹⁰ to generate our research question:

S: Setting – Healthcare settings

P: Perspective – Patients and/or health care providers

I: Intervention (phenomenon of interest) – Trust

C: Comparison – Not applicable in this study

E: Evaluation – All types of evaluation

Based on this framework and building on the previous review by Calnan and Rowe, the research question that guided our review was as follows: What are the characteristics of empirical research in the health care setting that (a) examine the role of trust in the patient provider relationship (b) investigate interventions that might influence levels of trust (c) examine the consequences of trust or (d) report trust as an emergent finding?

Search Strategy

In order to access potential studies in the medical, social science and grey literature to address our research question, we searched the following electronic databases from January 2004 to November 2010: EMBASE, MEDLINE, PsychINFO, The Cochrane Library, Applied Social Sciences Index and Abstracts (ASSIA), Soc Index, Web of Science, ETHOS, SIGLE. The databases were searched for text and subject heading keywords relating to “trust” and “health care” and “relationships” in a variety of combinations depending on the database. See Table 1 for Medline search.

Studies were included that:

- had been written in the English language;

- reported on empirical research;
- had been undertaken in or alluded to health care settings;
- had patients and/or health care providers as participants;
- had examined the role of trust in relationships, had investigated interventions that might influence levels of trust, had examined the consequences of trust, or had reported on trust as an emergent finding.

Identification of Relevant Abstracts

Two review authors (NB & RB) assessed the potential relevance of all titles and abstracts identified from the electronic searches. As a reliability measure the first 10% of the titles and abstracts were assessed by the two review authors together. The remaining title and abstracts (90%) were then divided equally and assessed independently by the same two reviewers. If either of the reviewers had any doubts about particular studies while assessing them independently they were resolved through discussion. A categorisation system was developed to classify excluded papers (Table 1). The other team members considered a sample of abstracts to refine the development of the inclusion criteria and categorisations.

Data Extraction

Given the number of relevant abstracts identified and the aim to provide a characterisation of research on trust, we decided to base data extraction on information available from the abstract and bibliographic information. The following information was extracted from the abstracts of included papers:

- year published;

- country study was carried out in - where the information was not present in the abstract the address of the first author was used as a proxy measure for where the research study was conducted;
- clinical specialty study was carried out in – studies were classified using the North American medical specialty list which organises medical specialties into surgical, medical and diagnostic groups¹¹;
- study method/design utilised – studies were classified as experimental, mixed-methods, observation, focus groups, interviews, mixed qualitative and questionnaire survey.
- perspective of study (whether data was collected from participants who were patients' or providers' or both);
- whether the study set out to examine trust or whether trust emerged as an important secondary outcome;
- whether the study examined providers trust in patients or providers trust in patients was reported as an outcome.

Data were extracted independently using a standard form by the same two reviewers (NB & RB) that identified the papers for inclusion. Again the first 10% of data extraction forms were completed jointly with the remainder being divided equally and data abstracted independently. Any queries about particular studies were resolved through discussion. The extracted data were collated and are presented in frequency charts.

RESULTS

Abstracts Identified

Figure 1 summarises the results of the literature search using the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) flow diagram¹². The literature search identified 13,632 articles, 5,179 of which were duplicates (Figure 1). The remaining 8,453 items were screened of which 7,587 were excluded. 7,043 of these did not address the topic of interest and 268 were not in the English language. The remainder of the papers did address issues of trust but were excluded because they were not empirical research (463), were not in a health care setting (21) or did not include patients or health care providers as participants (62). The remaining 596 items satisfied the inclusion criteria. The abstracts of these 596 papers were read and the relevant data were extracted.

Characterisations of Research

In total, 596 studies were published between 2004 and 2010 ranging from 77 in 2004 to 99 in 2010 and peaking at 110 in 2009. Most studies were carried out in the USA (44%) followed by 'other' European countries (20%) and the UK (12%) (Figure 3). The studies were carried out in a variety of clinical contexts with Family Care (28%) and Oncology and Palliative Care (16%) being the most common (Figure 4). The majority of methods employed were questionnaire surveys (34%), followed by interviews (30%) and focus groups (9%) (Figure 5). 58% of studies were conducted from the patient perspective i.e. study participants were patients, with 23% being from the provider perspective i.e. study participants were providers, and only 18% from both perspectives (Figure 6). The main types of health care providers were doctors (46%, of which almost half involved GPs) (Figure 7).

41% of included studies actually set out to examine trust with the remaining 59% being studies where trust emerged as a secondary outcome. Less than 5% of studies reported providers distrusting patients or patients feeling distrusted by doctors in their abstracts,^{1, 3, 13-36} of which only one study explicitly set out examine providers trust/distrust of patients³. None of the identified studies examined doctors trust of patients.

DISCUSSION

We have provided an up to date characterisation of the structure of the English language evidence base on trust between health care providers and patients, in order to identify new directions for trust research.

Our review found that there has been an increase in research on trust between providers and patients since the previous systematic review⁵. This review included 88 studies up until 2004 and even with narrower inclusion criteria (our study did not include studies on trust between healthcare providers and managers) our review found between 76 and 110 studies being published per year between 2004 and 2010. Despite this evident growth, the overall number of publications is still relatively low and is fluctuating rather than growing year on year like most fields of research³⁷.

The fact that the majority of studies were carried out in the USA implies that trust is an important research area in American health care. This may be because there are more universities/research institutes in the US and for most topics there would be higher levels of research. However it could also be related to the USA's market-based privatised healthcare

system where financial incentives and clinical practice are more overtly linked resulting in more obvious conflicts of interest. Patients in the USA report lower levels of trust in the medical system generally in comparison with other countries⁵. Furthermore differences in trust of health care providers have been found in racial disparities in health and access to health care and in lower rates of satisfaction with physician visits among African Americans than among other population groups⁴⁹. This highlights the fact that trust is a culturally determined concept and it is unlikely to be generalisable from one country to another and one healthcare system to another.

The focus of research on trust in the specialties of family care, and oncology and palliative care may be because trust is a more contentious issue in these contexts where the patients may be more vulnerably positioned and or reliant on the expertise reliability of the physician. Other under-researched specialties where provider patient trust is likely to be a major issue are in pain services³⁵ and medically unexplained symptoms where the legitimacy of pain and conditions are often questioned⁴⁷ and in relation to self care and safety⁴⁸.

A key finding of our mapping review is that researchers are continuing to focus on the same types of issues identified in the Calnan and Rowe review, rather than building on the evidence, which means there are still gaps in the areas that are being researched. The majority of studies have been conducted from the patient perspective and the issue of health care providers trust in patients is being ignored. While patients are the more vulnerable party in the trust relationship, reciprocal trust is important for an effective relationship and positive health care outcomes³. On the whole, doctors trust patients to

seek medical advice in a timely fashion unmotivated by other concerns, yet patients often work hard to negotiate the legitimacy of medical problems³⁸. Doctors are increasingly not just healers of the sick, they are also socially licensed adjudicators on contested or contestable claims by patients to illness, the need for treatment, time off work, disability benefits and so on. Empirical research is needed to re-address the imbalance and examine the 'other side' of trust, specifically the factors that influence provider's trust/distrust in patients and how this might affect the consultation and health-related behaviours. Only recently the first scale to measure physician trust in the patient was developed and validated³⁹ while there have been a plethora of scales developed over the years measuring patients' trust in doctors³⁹⁻⁴³. This may lead to much needed studies on this important area of trust.

Questionnaire and interview methods of data collection from the patient perspective were the dominant research approaches utilised by our included studies. While more studies are needed from the provider perspective, it is also important to have studies that explore the reciprocal nature of the trust relationship from both the patient and provider perspectives. Understanding the ways that trust manifests and how trust relations are forged necessitates the observation of interactions such as facial expression and other forms of 'body language'. There is a neglect in the literature on the 'embodiedness' of the interactions on which trust is based⁴⁴. Observational/ethnographic methods are a detailed way of witnessing human events in the context in which they occur, and can help solve problems beyond the reach of many other research approaches, particularly in the understanding of patients' and clinicians' worlds⁴⁵. These methods could provide an important much-needed insight into

how trust relations are enacted between patients and providers in consultations across different specialities.

A limitation of the study is that despite the wide ranging literature searched there may have been some literature missed, including literature published in languages other than English or studies that were about trust but used other related terms e.g. legitimacy. Extracting data from the abstract rather than the full paper meant that it was not possible to extract all of the information needed from all of the studies. However this only affected a small number of studies and thus would not have impacted on the main findings. Mapping reviews lack the synthesis and analysis of traditional systematic reviews.

In conclusion, providers' trust of patients remains a neglected area on the trust research agenda. Empirical studies examining the factors that influence provider's trust/distrust in patients and how this might affect the consultation and patient health-related behaviours are urgently needed to readdress this imbalance. The potential of ethnographic methods in this area is underexploited.

Conflicts of Interest: None

Figure 1: Literature Identified

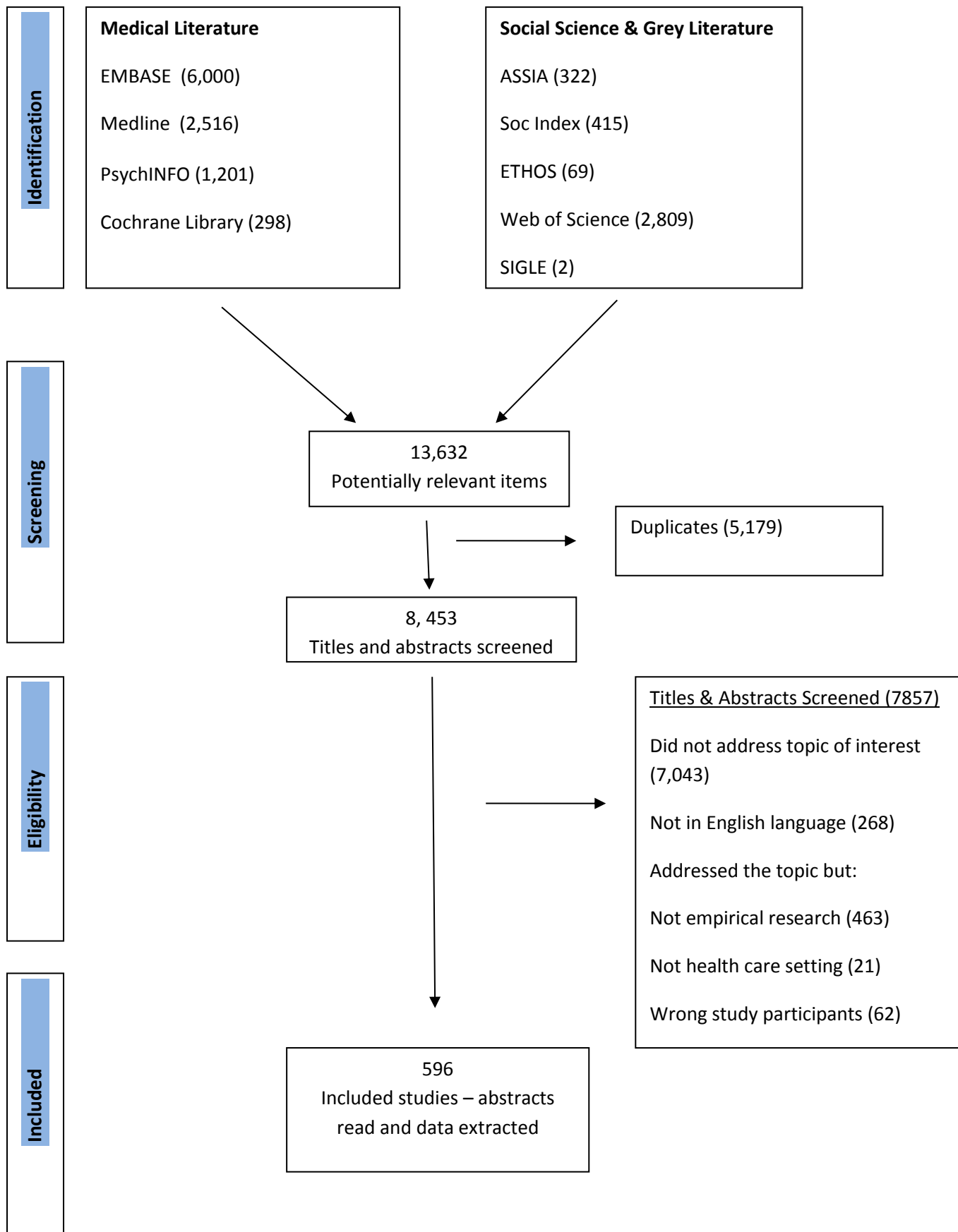


Figure 2: No. of empirical research studies on trust between 2004 and 2010

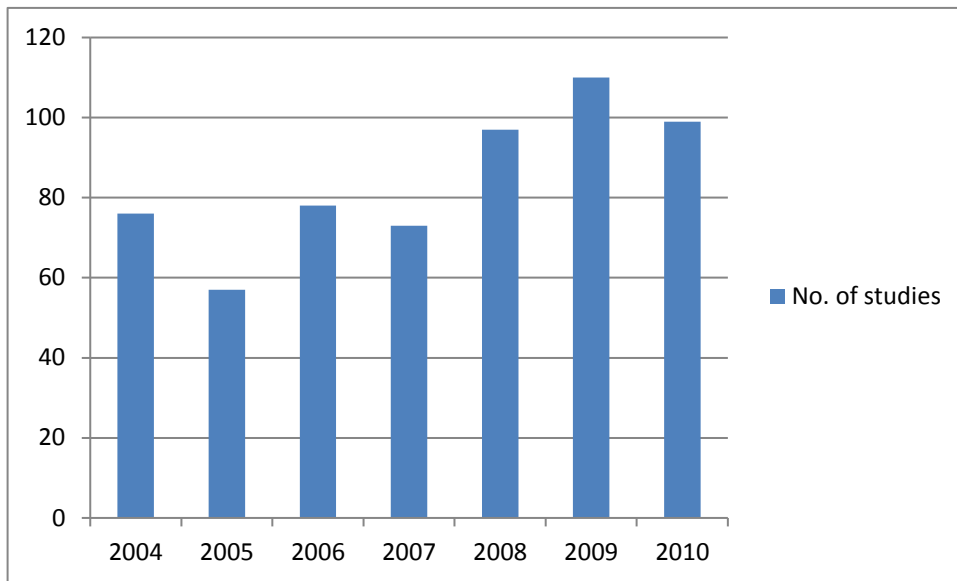


Figure 3: Research into trust by country

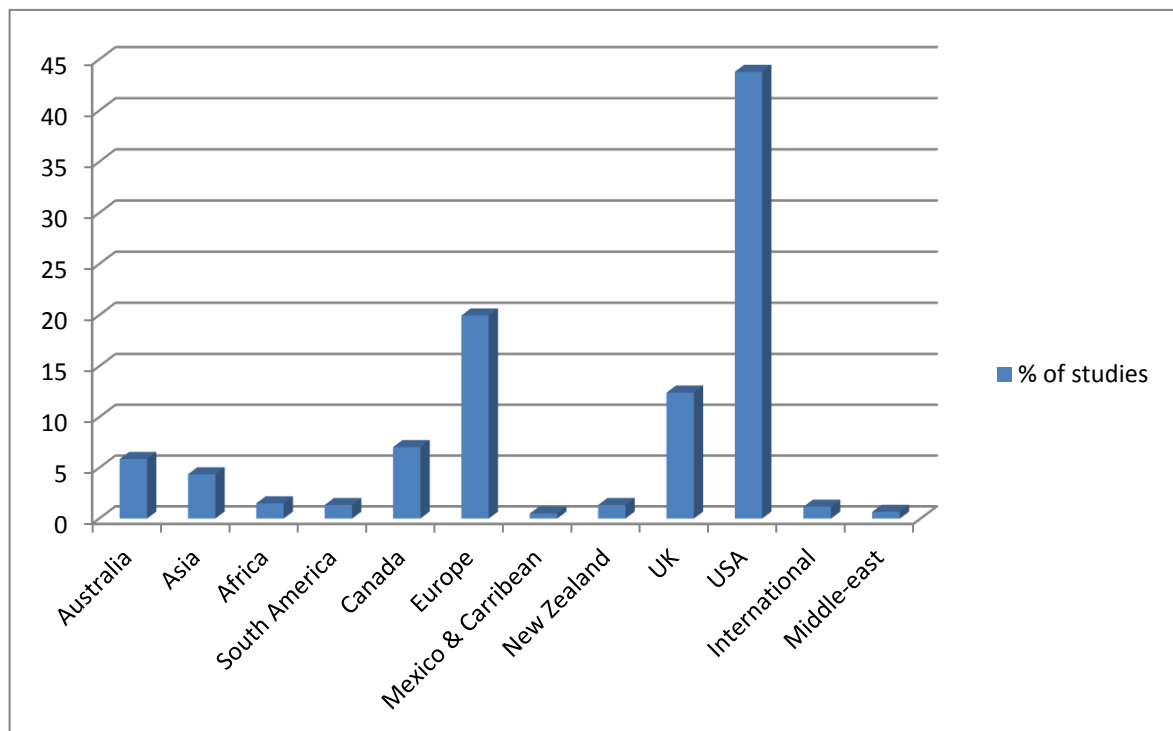


Figure 4: Research into Trust by Clinical Specialty

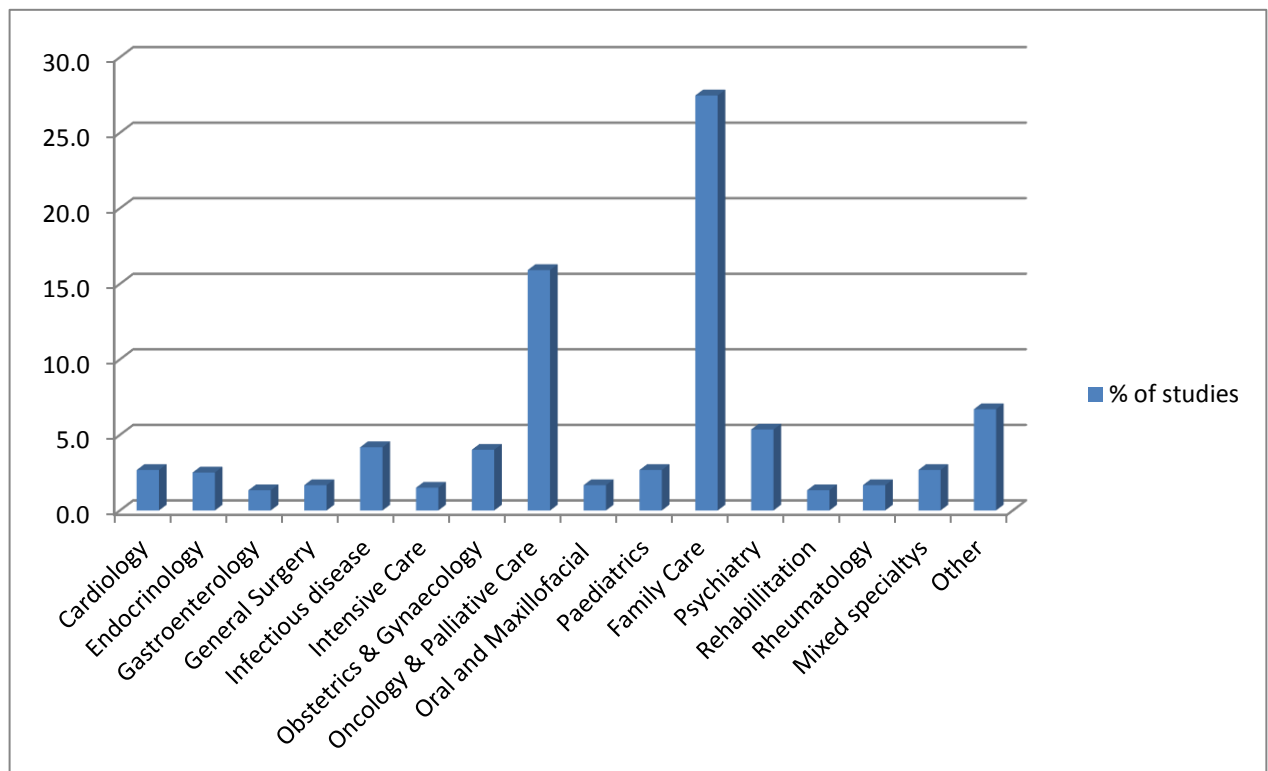


Figure 5: Research methods utilised by studies

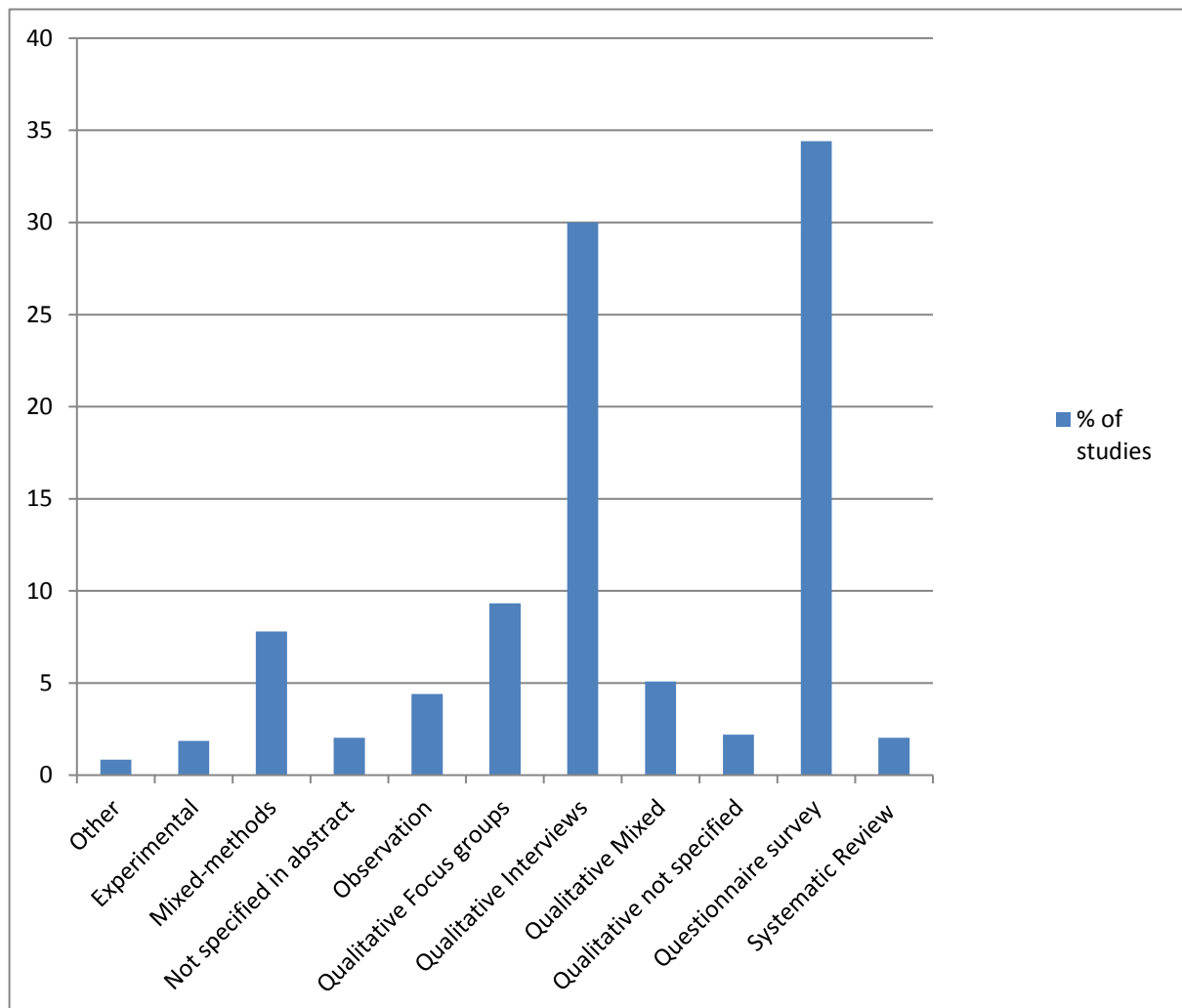


Figure 6: Perspective of interest

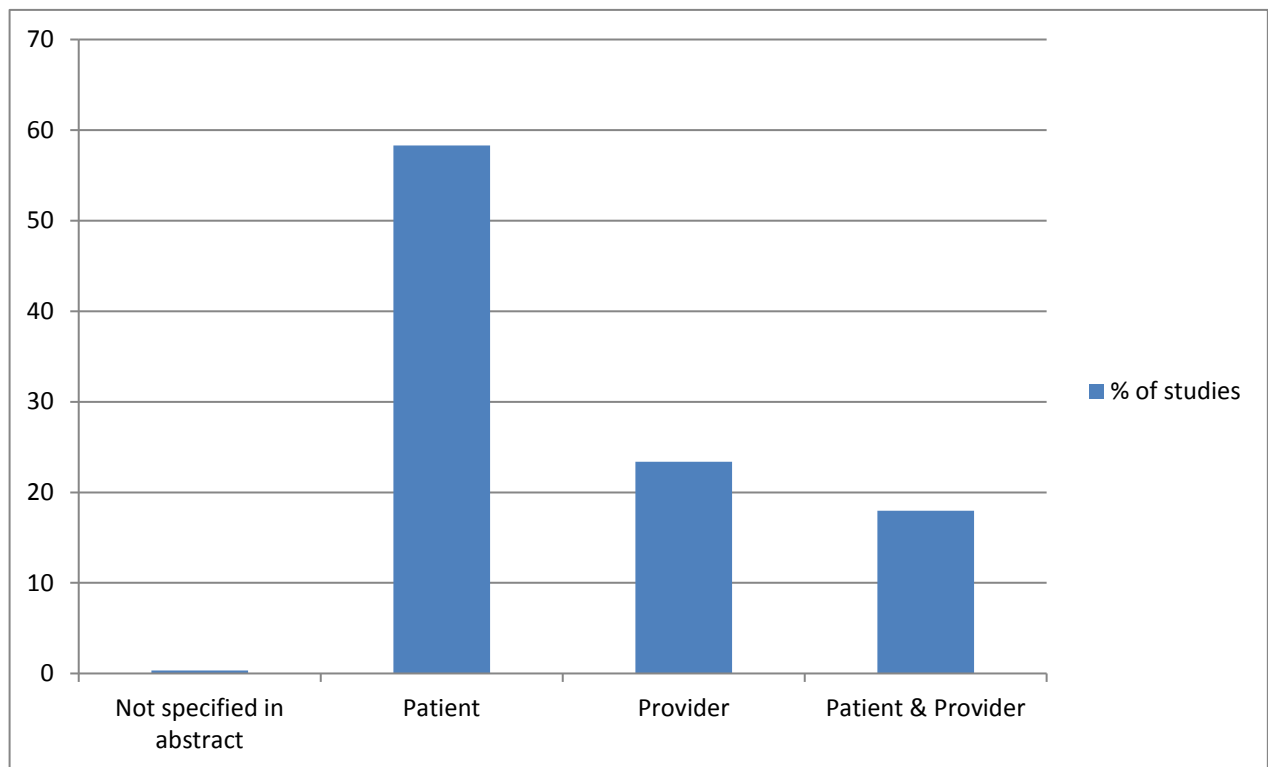
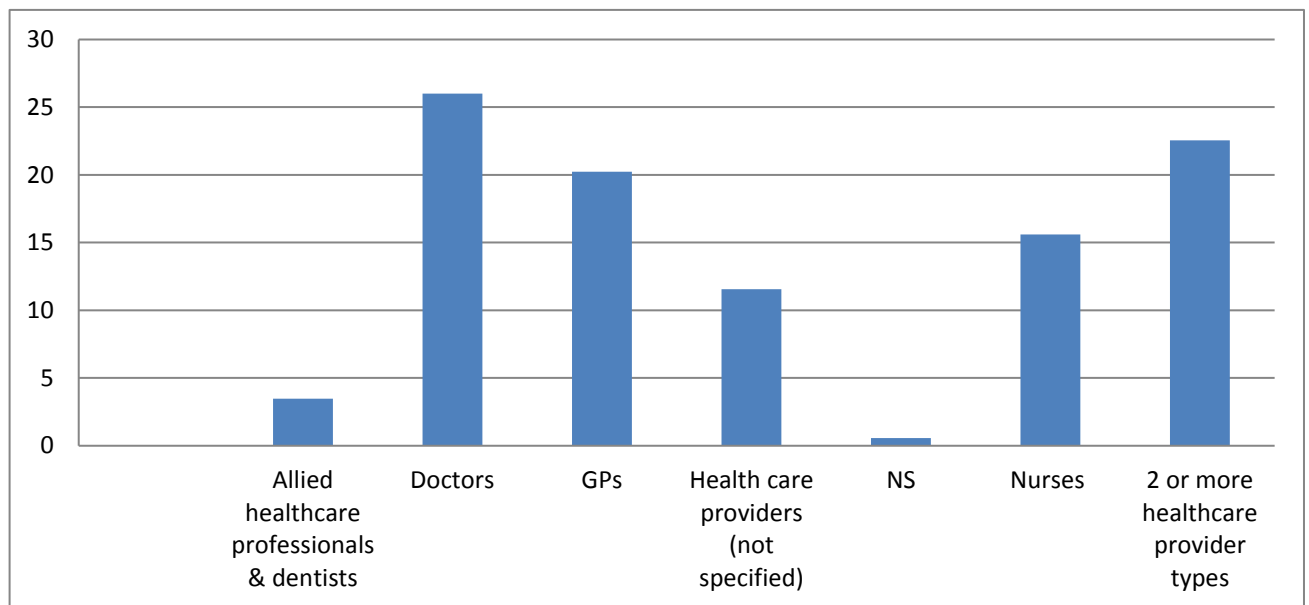


Figure 7: Types of health care providers



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