Author's response to reviews

Title: Are they really refusing to travel? A qualitative study of prehospital records

Authors:

Deborah Shaw (debbie.shaw@lincsambulance.nhs.uk)
Jane V Dyas (jane.dyas@nottingham.ac.uk)
Jo Middlemass (Jo.Middlemass@broxtoweucnall-pct.nhs.uk)
P ANNE Spaight (anne.spaight@lincsambulance.nhs.uk)
Maureen M Briggs (mmbriggs@tiscali.co.uk)
Sarah Christopher (wyrsister7@btinternet.com)
A NIROSHAN Siriwardena (niro.siriwardena@lincoln.ac.uk)

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Author's response to reviews:

Dear Editor,

Thank you for asking us to resubmit a revised paper on the basis of the comments of the two reviewers, comments which we found helpful and constructive. We note that one reviewer (SMS) suggested discretionary revisions, whereas the other reviewer (HS) advised major revisions but that the reviewers felt that the paper had 'potential to add important findings to the public arena concerning current practice'. We have addressed the issues raised and suggestions made by both reviewers as detailed below.

Response to reviewers:
Title: We did subject written data to qualitative analysis and therefore believe that the previous title does reflect the methods and findings reported. We would be prepared however to change the title to: Are they really refusing to travel? A study of prehospital records

Abstract

We agree that refusal to travel is a complex concept. This study investigated written data using a carefully described systematic analysis to try and understand this concept in more detail. While we agree that it is self evident that refusal to travel is associated with non-conveyance or non-transportation the analysis was of instances of 'refusal to travel'.

We have changed the following sentence for clarification: 'Refusal by the patient to travel after calling an emergency ambulance may lead to a preventable waste of scarce resources if an alternative appropriate response could be employed.'

We agree that the following conclusion is unsupported and have deleted the following sentence from the conclusion to the abstract: [Patient education for appropriate use of newly configured primary and prehospital services and better referral pathways to primary care will also reduce RTT.].

The following sentence has been amended as suggested: 'These recommendations should be considered within the context of the plans for widening the role of ambulance services.'

Introduction

The overlapping concepts described in this paper are briefly described: 'There is considerable overlap between the concept of an 'inappropriate call', non-transport (or non-conveyed call) and 'refusal to travel' (RTT).'

It is true that reference 3 related to non-conveyed callers. This is corrected in the text as follows: 'The Department of Health cites the national average of non-conveyed calls as 17%.[3]'

Methods

Both reviewers requested more information about local context including despatch systems, number of calls and demographics. This is now included in the methods section as follows: 'This study was conducted during 2003 and 2004 in Lincolnshire, a large rural county for which Lincolnshire Ambulance and Health Transport NHS Trust provides prehospital services to a population of over 700,000. At the time of the study
all patients requesting an emergency ambulance were assessed by nonmedical trained dispatchers using a decision support tool, the Ambulance Prehospital Dispatch System (AMPDS) and if categorised as needing an ambulance response were required to be transported to hospital unless they completed a patient not treated/transported' form, known as a 'refusal to travel form'. No medical or nurse assessment was used to assess or prioritise calls.'

In the second paragraph of the methods section the source of data, considered to be the main weakness of the paper were more fully described. The weakness was also raised in the discussion although the fact that many cases of refusal to travel were a negotiated joint decision is a key finding from the research. 'Free text data were collected retrospectively from standard 'patient not treated/transported' forms written by paramedics or ambulance technicians crews (clinicians) and signed by patients to confirm that they received advice and declined transport. Corresponding patient record or report forms, also written by clinicians, were also used to obtain information on patient details, complaint, observations and treatments. It was the responsibility of the crew to ensure where possible that the record was completed in cases where transport was declined. This occurred in the context of no protocols to enable crews to decide to see and leave or see and treat patients.'

We noticed some minor errors in the raw data during the process of revision and these have been duly corrected. Under sample selection the following sentences are added to clarify the data: 'There were 76635 emergency requests with activation of an ambulance response from April 2003 to March 2004. This resulted in 63650 transportations, 9068 instances of refusal to travel (RTT), 967 deaths and 2950 unclassified (other) calls. The rate of RTT as a proportion of the total requests was therefore 11.8%. 'A single month (October 2004) was therefore selected as typical for both the pilot and the main study and consecutive cases of RTT were selected for analysis until saturation was reached.'

Under data collection, theoretical saturation was used to mean saturation which led to no further categories for the theoretical framework. See Murphy E, Dingwall R, Greatbach D, Parker S, Watson P. Qualitative research methods in health technology assessment: a review of the literature. Health Technology Assessment 1998;2(16), p141. This was clarified as follows: '397 (i.e. a further 347) records were required to achieve theoretical saturation, i.e. no new data contributing to theoretical development of new or existing categories.'

The sentence 'Categories were derived...' has been amended for clarification as follows: 'Data were further organised into categories and grouped into themes by two independent researchers (JM, DS). These were described and named after discussion by the whole research team (which included paramedic, nursing, medical, allied health professional and lay members) reflecting a multidisciplinary perspective.' We believe that this method helped to reduce bias. Assessments about categories were made by the two researchers and any areas of uncertainty agreed with the team.

We agree that descriptive statistics were not used to determine theoretical saturation and the relevant sentence is changed as follows: 'The descriptive statistics were used to assess frequencies within themes and determine theoretical saturation for categories of RTT.'

Overall we have tidied and added explanation to the methods section as advised by both reviewers.

Results
The first paragraph of the results does include data and therefore we have decided to retain it in this section

Clarification is given on the numbers in the section on samples and in the first paragraph of the results section further details of numbers and costs is given as follows:

'An audit during April 2003 to March 2004 identified 9068 instances of RTT out of 76635 calls comprising 11.8% of emergency calls throughout the year in Lincolnshire. There were also 2950 cases where a patient did not travel where death was confirmed on scene by a doctor, the patient refused to provide details or to sign a disclaimer, or alternative means of transportation occurred, for example by air ambulance. The overall rate of non-transportation for the year was therefore 16.9%.'

The following sentence is moved from the discussion to the results section under presenting condition as advised by one reviewer. 'Sometimes information was recorded as a medical diagnosis such as chronic obstructive pulmonary disease (COPD) whilst at other times using lay terminology, such as breathing
difficulties. Whatever the preferred terminology failure to transport patients to hospital was usually explained in medical terms.'

The second paragraph on page 5 has been rewritten as suggested: 'A count of clinical observations recorded on the patient report was included in the analysis because this indicated that the crew had made a clinical assessment of the patient. This was important because some instances of RTT, for example when the patient was intoxicated, could involve refusal of clinical assessment as well as transport.'

Further information is given on the cost estimate as follows: 'RTT was estimated to cost GBP1.45 million. This was calculated from an average cost per emergency activation of GBP160.02 (a figure derived from trust data), 9068 episodes of RTT x GBP160.02 per activation costing GBP1,451 million for the year. This assumed that RTT activations were a similar cost per activation as non-RTT emergency calls.'

Table 1 and 2 have been merged to include all six conditions and numbers assigned against each category as suggested by one reviewer. The reference to 31 conditions has been removed because this is confusing. The paragraph headed presenting condition has been altered as follows: '409 presenting conditions were recorded and these were grouped into six main problem themes. In some instances there was more than one presenting condition recorded for a single patient. Most patients who 'refused to travel' were recorded as having a medical condition or problems with mobility. Themes were further subdivided into specific or more general conditions (Table 1).

Numbers and percentages Table 3 and the corresponding section headed 'Reasons for refusal to travel' have been corrected. Assessment of whether there was a medical emergency or whether the problem was psychological or social was ultimately decided by the researchers, based on the written records.

Discussion
The beginning of the discussion has been altered to take into account suggestions from the reviewer and new information has been presented in the results section as above before being discussed here. The word 'inconsistent' has been removed from this paragraph because it conveyed a meaning that was not intended.

'These findings show that recorded reasons for completing a 'refusal to travel' form were complex and diverse. Sometimes these consisted of patient generated reasons and at other times clinically derived reasons. These were expressed variably as medical diagnoses or using lay terminology and in physical terms more often than psychological or social descriptions. In most (over 90%) cases, although a RTT form was completed, it appeared that refusal to travel was a negotiated shared decision.

Weaknesses of the study are discussed in more detail as follows:
'A weakness of the study included the data source, the written clinical records, from which qualitative information which was derived. These were sometimes brief, consisting of a few words and therefore not enough to gain any in-depth understanding of why certain phenomena were occurring.'

'The focus on physical rather than psychological or social terms by clinicians could have been due to the way the form was constructed or because of expectations of clinicians. For example, only one social problem was explicitly recorded in our sample, despite many calls being described anecdotally by ambulance crews as due to social problems.'

Towards the end of the discussion the paragraph on 'inappropriate' calls and competence was expanded as follows.

Calls were labelled by clinicians as 'inappropriate' for very few patients. Where calls were for trivial complaints or by frequent callers, mental health issues may have been an underlying factor. Calls requesting medication supplies could have been addressed by patient education. Competence to consent to RTT, for example in the case of intoxication' was not assessed by crews.

We hope these revisions meet with your approval and would be grateful if you could advise on whether you will be able to accept this paper for publication on the basis of the revised paper.

Yours sincerely
Deborah Shaw
Niro Siriwardena
On behalf of the authors.