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Language barriers and patient safety risks in hospital care. A mixed methods study

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ABSTRACT

Introduction: A language barrier has been shown to be a threat for quality of hospital care. International studies highlighted a lack of adequate noticing, reporting, and bridging of a language barrier. However, studies on the link between language proficiency and patient safety are scarce, especially in Europe. The present study investigates patient safety risks due to language barriers during hospitalization, and the way language barriers are detected, reported, and bridged in Dutch hospital care.

Methods: We combined quantitative and qualitative methods in a sample of 576 ethnic minority patients who were hospitalized on 30 wards within four urban hospitals. The nursing and medical records of 17 hospital admissions of patients with language barriers were qualitatively analyzed, and complemented by 12 in-depth interviews with care providers and patients and/or their relatives to identify patient safety risks during hospitalization. The medical records of all 576 patients were screened for language barrier reports. The results were compared to patients' self-reported Dutch language proficiency. The policies of wards regarding bridging language barriers were compared with the reported use of interpreters in the medical records.

Results: Situations in hospital care where a language barrier threatened patient safety included daily nursing tasks (i.e. medication administration, pain management, fluid balance management) and patient–physician interaction concerning diagnosis, risk communication and acute situations. In 30% of the patients that reported a low Dutch proficiency, no language barrier was documented in the patient record. Relatives of patients often functioned as interpreter for them and professional interpreters were hardly used.

Discussion: The present study showed a wide variety of risky situations in hospital care for patients with language barriers. These risks can be reduced by adequately bridging the language barrier, which, in the first place, demands adequate detecting and reporting of a language barrier. This is currently not sufficiently done in most Dutch hospitals. Moreover, new solutions to bridge language barriers are needed for situations such as routine safety checks performed by nurses, in which a professional or even informal interpreter is not feasible.

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What is already known about the topic?

- Language barriers can be a threat for patient safety.
- Language proficiency should be noted in patient records.
- Language barriers must preferably bridged with professional interpreters.

What this study adds

- We identified patient safety risks for patients with inadequate language proficiency in specific daily hospital care situations like fluid balance management and pain control.
- The study shows that professional interpreters are not always feasible to overcome patient safety risks related to language barriers.
- Language barriers are often not adequately reported and bridged in Dutch hospital care.

Existing research has established that language barriers can be a threat for patient safety, language proficiency should be noted down in patient records, and that language barriers should preferably be bridged through the use of professional interpreters.

In this study, we identified patient safety risks for patients with inadequate language proficiency in specific daily hospital care situations like fluid balance management and pain control. We also showed that the use of professional interpreters is not always feasible when trying to overcome patient safety risks related to language barriers. Additionally, we established that language barriers are often not adequately reported and bridged in Dutch hospital care.

1. Introduction

A language barrier, which is a communication barrier resulting from the parties concerned speaking different languages, has been shown to be a threat to the quality of hospital care (Karliner et al., 2007). Patient safety is a prerequisite for good quality of care. We define safe hospital care as care where no harm is caused to patients by not following professional standards or by inadequate healthcare management resulting in adverse events such as misdiagnosis or adverse drug reactions. Patient safety risks are situations that potentially lead to adverse events. Several studies described the link between a language barrier and patient safety and Divi et al. showed that US patients with low English proficiency experienced more adverse events than patients with adequate English proficiency (Divi et al., 2007; Johnstone and Kanitsaki, 2006; Suurmond et al., 2010). Other studies showed adverse events associated with language barriers in specific domains in hospital care. For example, Wasserman et al. found that medication errors represented a larger share of adverse events for those patients who had a language barrier compared to those who did not (Wasserman et al., 2014).

Several international studies showed a lack of adequate detecting, reporting, and bridging of a language barrier (Karliner et al., 2007). International guidelines, such as the Joint Commission International, provide guidelines to overcome language barriers in their "Standards for hospitals" (JCIA, 2014). They state that: (1) patient education, follow-up instructions, and informed consent must be given in a language the patient can understand; (2) the hospital should seek to reduce language barriers; and (3) the patient's language must be assessed and noted in the patient record. The main accreditation system for quality of hospital care in the Netherlands does not contain standards explicitly related to language barriers (NIAZ).

Professional interpreters are considered the best bridge for a language barrier in health care (Karliner et al., 2007). Internationally, underuse of interpreters in healthcare was reported (Diamond et al., 2009; Schenker et al., 2011). A Dutch study convincingly showed underuse of professional interpretation services in general practice and another study using professional interpretation service data also suggests underuse in hospital care (Langendijk-van den Berg et al., 2014; Meeuwesen and Twilt, 2011). However, evidence on the underuse of professional interpreters in Dutch hospital care is lacking.

A Dutch record review cohort study among 1339 hospitalized patients assessing ethnic inequalities in adverse events in Dutch hospital care enabled us to investigate how language barriers were reported and bridged in Dutch hospital care, and to identify patient safety risks related to language barriers during hospitalization (van Rosse et al., 2012). Since nurses and physicians have different tasks in the care process and play different roles, we analyzed patient safety risks during nursing care and during physician care separately. The following research questions were answered in this study:

1. At which moments during hospitalization do language barriers constitute a risk for patient safety?
2. How are language barriers detected and reported in hospital care?
3. How are language barriers bridged in hospital care? What is the policy and what happens in practice?

2. Methods

This mixed-methods study was embedded in a cohort study to investigate ethnic inequalities in adverse event rates in four Dutch urban hospitals among 1339 hospitalized patients, of whom 576 were patients with an ethnic minority background whose data were used for the present study (Diamond et al., 2014; van Rosse et al., 2012; 2014). Patients were included in the cohort during their hospital admission on one of 30 participating wards (10 of which were surgical and 20 non-surgical), and signed a consent form to review their medical record. Details on patient inclusion can be found in two other publications (van Rosse et al., 2012; 2014). Data collection took place between December 2010 and February 2013 and is visualized in Fig. 1.

2.1. Data collection

2.1.1. Record review

The complete patient records of all 576 patients were screened for the bigger cohort study by one of the seven