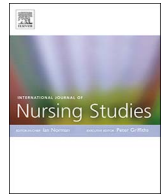




Contents lists available at ScienceDirect

## International Journal of Nursing Studies

journal homepage: [www.elsevier.com/locate/ijns](http://www.elsevier.com/locate/ijns)

## What is the impact of professional nursing on patients' outcomes globally? An overview of research evidence



Samantha Coster, Mary Watkins, Ian.J Norman\*

King's College London, Florence Nightingale Faculty of Nursing, Midwifery &amp; Palliative Care, London, United Kingdom

## ARTICLE INFO

## Keywords:

Nursing  
Nurse led  
Nursing interventions  
Patient outcomes  
Impact  
Overview

## ABSTRACT

**Background:** Nursing is an integral part of all healthcare services, and has the potential of having a wide and enduring impact on health outcomes for a global ageing population. Over time nurses have developed new roles and assumed greater responsibilities. It is increasingly important to demonstrate the safety and overall impact of nurses' practice through research, to support the case for greater investment and development of nursing services around the world.

**Objective:** To provide an overview of existing research evidence on the impact of nursing on patient outcomes, identify gaps in evidence, and point to future priorities for global research. Specifically to address two questions: what is the evidence that nursing contributes to improving the health and well-being of populations?; and where should research activity be focused to strengthen the evidence base for the impact of nursing?

**Methods:** A search of the literature from 1996 using CINAHL, MEDLINE, the Cochrane Library, Google Scholar and the NICE evidence databases using the key words: nursing, nurse led, nursing interventions and patient outcomes. Initial analysis of the retrieved citations to reveal clusters of evidence of nursing impact in clinical areas which had been subject to systematic/integrative reviews or meta-analyses. Further analysis of these reviews to provide an overview of the research evidence for nurses' contributions to healthcare to inform discussion on future research agendas. We use the terms low, moderate and high quality evidence to reflect the assessments made by the review authors whose work is presented throughout.

**Results:** Analysis of 61 reviews, including ten Cochrane reviews and two scoping/selective reviews to provide a summary of the research evidence for nurses' contributions to healthcare in the following areas of practice: nursing in acute care settings; nurses' involvement in public health; the contribution of specialist nurse and nurse-led services to the management of chronic disease; comparison of care provided by nurses and doctors; and task shifting to invasive procedures.

**Conclusions:** There is evidence that adequate numbers of well-educated nurses working in acute care areas can reduce the risk of patient mortality, although the evidence for this is confined to studies in high income countries and the evidence is not sufficiently robust to draw up definitive nurse: patient ratios. There is also moderate evidence that well trained nurses can produce health outcomes that are equivalent to those of doctors for patients with a range of chronic health problems, particularly for those patients managed in primary care, and that nurse-led care may be more effective than medical care in promoting patient adherence to treatment and patient satisfaction. There is low to moderate evidence for the benefits of parenting support programmes delivered by nurses on a range of health outcomes; and for the impact of home visiting on improving function and other health service outcomes for older people.

The wider societal benefits of home visiting by nurses and the impact of this on long term outcomes and related cost-effectiveness of home visiting has not been established. There is limited available information regarding the wider global impact of increasing the numbers of nurses and their contribution to healthcare through improved education. Moreover there is very little evidence for the cost-effectiveness of changing care providers from doctors to nurses and as the majority of cost data available has tended to come from studies based in higher income countries, their external validity in terms of applicability to settings in low and middle income countries is questionable. In addition to effectiveness, cost and safety, future research needs to address how implementing expanded nursing roles and task shifting impacts on the morale, retention, and professional development of

\* Corresponding author.

E-mail address: [ian.j.norman@kcl.ac.uk](mailto:ian.j.norman@kcl.ac.uk) (I.J. Norman).

nurses and the other workforces, and the longer term implications of these developments both locally and internationally.

### What is already known about the topic?

- Nurses are the largest professional healthcare workforce and maximising their contribution to health is essential to achieve health coverage for a global ageing population.
- Robust evidence is needed to inform practice and to support the case for greater investment and development of nursing services around the world.

### What this paper adds

- Provides a summary of clusters of research evidence of nursing impact in clinical areas which have been subject to systematic/integrative reviews or meta-analyses.
- Identifies outcomes that future research studies of expanded nursing roles and task shifting should consider.

## 1. Introduction

Nurses are the largest professional healthcare workforce and maximising their contribution to health is essential to achieve health coverage for a global ageing population (World Health Organization, 2013). Often as first-line carers, nurses play an essential part in increasing patient access to safe care, whilst improving the lives of vulnerable communities through education.

Over time nurses have developed new roles and assumed greater responsibilities, with the emergence of advanced practice nursing roles, such as nurse practitioners, clinical nurse specialists and consultant nurses, a trend which has accelerated since the 1980s. Nursing is an integral part of all healthcare services, and has the potential of having a wide and enduring impact. To do this, substantial workforce investment is required and nursing leadership needs to be supported at all levels to influence policy locally and internationally (World Health Organization, 2012; APPG, 2016). As the role of nursing develops, it is increasingly important to demonstrate the safety and overall impact of nurses' practice through research. Robust evidence is needed to inform practice and to support the case for greater investment and development of nursing services around the world.

This paper provides an overview of existing research evidence on the impact of nursing on patient outcomes, identifies gaps in evidence, and points to future priorities for global research. It summarises the extent to which research supports the deployment of nurses in expanded roles across a range of settings, where they have primary responsibility for patient diagnosis, treatment and management, either in collaboration with or substituting for medical staff.

## 2. Methods

This research review aims to answer two questions:

1. What is the evidence that nursing contributes to improving the health and well-being of populations?
2. Where should research activity be focused to strengthen the evidence base for the impact of nursing?

A search of the literature from 1996 to the present was conducted using CINAHL, MEDLINE, the Cochrane Library, Google Scholar and the NICE evidence databases using the key words: nursing; nurse led; nursing interventions and patient outcomes. This initial search yielded over 20,000 individual studies; discussion papers and reviews plus grey

literature; which for the most part reported low quality evidence on nursing impact.

Given the wide range of health services which involve nurses, we were necessarily limited in the scope of our review. Initial analysis of the retrieved citations revealed clusters of evidence of nursing impact in clinical areas which had been subject to systematic/integrative reviews or meta-analyses. Our focus was therefore narrowed to include these areas of practice where evidence of nursing impact has accumulated through systematic reviews and meta-analyses. Where possible the results of Cochrane systematic reviews were included as the gold standard, although few of these shed light on the contribution of nursing *per se* to many patient outcomes. In research based in high income countries, reviews were subsequently restricted to those able to provide evidence for the impact of nurses specifically, where the clinical outcomes were sensitive to nursing care, or where the nursing role was principal to successful disease management.

The final summary included evidence from 61 reviews, including ten Cochrane reviews and two scoping/selective reviews. As in a scoping review, the scientific rigour of individual reviews were not subject to quality review. In addition, only English Language publications were included.

The length, and thus the breadth and focus of this research overview means that it is not exhaustive, in that it was not possible to include every relevant review retrieved. In addition, the review is limited to physical care, with mental health nursing interventions excluded. Nevertheless, the paper provides an overview of the research evidence for nursing contributions to healthcare to inform discussion on future research agendas. We use the term high and middle to low income countries as defined by the original reviews. We use the terms low, moderate and high quality evidence to reflect the assessments made by the review authors whose work is presented throughout.

## 3. Nursing in acute care settings

Within acute care, pinpointing the impact that routine nursing care has on patient outcomes has been facilitated by the development of outcome indicators which are considered most sensitive to nursing input (e.g. pressure sores or falls). In addition, a process indicator of nursing and of patient safety, which is potentially more sensitive than patient outcome measures, is the concept "failure to rescue." Failure to rescue refers to the failure of nurses to observe and intervene to prevent an avoidable complication leading to a patient's death, or a serious deterioration that may lead to an extended hospital stay (Silber et al., 2007).

The education of nurses has been repeatedly associated with the safety and quality of care in acute care. For example, employing better educated nurses appears to make a substantial positive impact on patient outcomes, patient experience and hospital costs. A single meta-analysis of the association between nursing education and patient outcomes (mortality and failure to rescue) reported that a 10% increase in the number of nurses with a university degree could help 1 per thousand patients avoid death, and a 10% increase in the number of nurses with a higher degree could reduce the odds of failure to rescue by 5% (Liao et al., 2017). Only a few studies were entered into the meta-analysis due to differences in study methods, design and outcome measurement, with the large and now well-known observational studies by Aiken's team influencing the majority of the results (Aiken et al., 2003, 2011, 2014).

In addition, we know that nurses can have greatest impact when there are sufficient numbers of them to effectively care for patients. As

Download English Version:

<https://daneshyari.com/en/article/7515124>

Download Persian Version:

<https://daneshyari.com/article/7515124>

[Daneshyari.com](https://daneshyari.com)