Turnover Among Nurses Working in the Caribbean:
A Description of a Protocol for an Upcoming Scoping Review

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Abstract

Background: Healthcare systems in the Caribbean like many countries struggle to provide essential services due to inadequate nursing personnel. Many suggest that the current nursing and nursing skill shortages in health care systems throughout the Caribbean are largely due to vacancies left by the turnover of nurses. **Purpose:** The purpose of this paper is to outline a well-known protocol for conducting a scoping review, which in this case involves an examination of current literature on retention and turnover of nurses working in Caribbean countries. It is expected that this work will facilitate greater use of this approach by nursing students. **Method:** The frameworks used include those developed by Arskey and O'Malley, Colquhoun et al., and Levac and O'Brien. Peer reviewed and grey literature text records available in English and Spanish reporting nurse turnover in the Caribbean will be included. The search strategy was developed in collaboration with an experienced health sciences research librarian. Peer reviewed and grey literature will be located using a range of electronic databases. Two reviewers will independently screen all records and extract data from all included records. Data will be collated into qualitative and numerical thematic summaries. **Discussion:** This planned review could extend the nurse turnover body of knowledge by elucidating the current turnover realities in the Caribbean.
Keywords: Scoping review protocol, Caribbean nursing turnover; nurse retention strategies.

Background

Despite more than 40 years of nurse turnover research, global commentary continues. Nurse turnover may be voluntary, where nurses have decided to leave their current position to transfer to another job within their employing organization, leave their organization altogether, or leave the nursing profession (Hayes et al., 2006; Tummers et al., 2013); or involuntary, which is initiated by the employer as opposed to the nurse (e.g. mandatory retirement) (Price 1977). Nurse turnover is a particularly important issue given the direct link between nurse-patient ratios, level of nursing education and improved patient outcomes (Aiken et al., 2014; Zhao et al., 2019). Nurse turnover has negative economic consequences to the organizations through lost productivity and lost human capital. This combined with nurses who are left behind to cope with increased workloads and worsening work conditions threatens the quality and safety of patient care (Antwi & Bowblis, 2018).

Much of the nursing turnover research examines voluntary turnover or "quit intention". Quit intention – an employee's intent to voluntarily withdraw from an organization or profession (Tett & Meyer, 1993) – has been consistently considered the best predictor of actual turnover in nursing (Flinkman et al., 2010; Labrague et al., 2018). In a multi-level study of 23,076 registered nurses working in hospitals in 10 European countries, organizational quit intention was strongly related to unit level variables such as staff and resources, nursing impact on hospital affairs and nurse-physician relationships. There was variability at both national level (6.9%) and patient care unit level within hospitals (6.9%) regarding current workplace *quit intentions*. However, less variability related to *intention to quit* the profession was found at the national (4.6%) and unit level (3.9%) (Leinweber et al., 2016).

Nurse turnover is a complex phenomenon influenced by many factors. Multifactorial organizational, professional, and personal issues intersect to either directly or indirectly influence a nurse's decision to quit their current position, the profession, or to leave their country (Drennan & Ross, 2019). Multiple comprehensive reviews have found consistent predictors of turnover shared among nurses from countries in Asia, Australia, Europe and North America, such as job satisfaction, age, tenure, organizational commitment, managerial and collegial relationships, work environment and perceived job prospects (Halter et al., 2017; Hayes et al., 2012). Job satisfaction is consistently identified as a major factor in nursing turnover, highlighting its relationship to several organizational, professional, and personal variables (Halter et al., 2017). While consistent predictors of nurse turnover have been identified, differences occur across demographics, units, organization types, work settings and countries, with nurse turnover ranging between 5 – 17% (Buchan et al., 2018; et al., 2016; Park et al., 2019). Voluntary or involuntary, turnover at the organisational level (when nurses leave their jobs); or at the professional level (where nurses leave nursing work altogether) both contribute to the shortage of nurses (Dewanto & Wardhani, 2018; Mazurenko et al., 2015).

Nurse Turnover in the Caribbean

Nurse turnover in the Caribbean is not a new phenomenon. For decades, the movement of these healthcare professionals has received attention regionally and internationally (Brissett,

2019; Yeates,2010). Many suggest that the current nursing and nursing skill shortages in health care systems throughout the Caribbean are largely due to vacancies left by the turnover of nurses, primarily through international emigration (Rolle et al., 2020). Vacancy rates for nursing positions vary across the Caribbean. Available estimates indicate that vacancies for approved and funded nursing positions in English-speaking Caribbean countries have increased from 30% to over 40% over the past decade (World Bank, 2009; Jacobson, 2015). Over 90% of nurses born in the Caribbean countries of Guyana, Haiti and Jamaica have left to practice in Organisation for Economic Cooperation and Development (OECD) countries, while their home countries struggle to operate with critical health personnel shortages (Organization of American States/Organization for Economic Development, 2016). Some countries report reduction of critical services due to the lack of nursing personnel (Rolle et al., 2020).

Several reviews identify commonalities in the predictors on nurse turnover in a number of countries, however, the Caribbean as a region or individual Caribbean country contexts are not represented (Halter et al., 2017; Hayes et al., 2012). Predictors of Caribbean nurse turnover may be similar to those of counterparts in other countries, however, such generalizations are unwarranted in the absence of empirical data. Furthermore, any examination of predictors and retention strategies should include local context (Foster, 2017).

Regional, country, work setting, and personal context all matter. A solid understanding of predictors of nurse retention and turnover will enable nurse leaders, organizations and policy makers to develop context-specific, feasible, and evidence-based recruitment and retention strategies. Hence, the purpose of this review is to scope a body of literature and identify key themes about retention and turnover of nurses working in countries of the Caribbean. The following research question will guide the review: What is the scope of the literature about retention and turnover of nurses working in the Caribbean, including the amount, type, sources, distribution, and focus of the empirical/conceptual and grey literature?

Method

The team for this scoping review will consist of three researchers experienced in scoping review methodology as well as in the substantive content area of organizational behaviour and turnover. We will follow the five-stage framework for scoping review as proposed by Arksey and O'Malley (2005). We have selected a scoping review because we believe it would best answer our guiding question (i.e., What is the scope of the literature about retention and turnover of nurses working in the Caribbean?) The question is broad, and relevant studies that would help answer it are diverse in design and quality. Scoping reviews, used with increasing frequency in health research, are conducted to summarize various types of evidence to convey the scope and depth of a topic (Colquhoun et al., 2014). Two main methodological differences, the specificity of the guiding research questions, and incorporation of quality assessments, distinguish systematic reviews from scoping reviews. Scoping reviews do not include a quality assessment (Levac et al., 2010). Results of this study can identify gaps in the literature and inform the development of future systematic reviews of the literature, which address specific, relevant questions (Arksey & O'Malley, 2005; Levac et al., 2010) relating to the nurse turnover, specifically in the Caribbean context.

Stage 1: Identifying the research question

Research questions in a scoping review are intentionally broad (Arksey & O'Malley, 2005; Levac et al., 2010) This review will seek to answer: What is the scope of the literature about retention and turnover of nurses working in the Caribbean including the amount, type, sources, distribution and focus of the empirical/conceptual and grey literature?

Stage 2: Identifying the academic and grey literature

To identify academic and grey literature (i.e., unpublished research or research produced, published and distributed outside of academic settings), we developed and pre-tested a comprehensive search strategy in collaboration with a health science research librarian for each database. No date restrictions will be applied to allow the inclusion of the greatest number of articles. The following databases will be searched for peer reviewed literature:

- Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily <1946 to Current>
- Ovid Embase <1974 to Current>, Ovid Global Health <1910 to 2019 Week 25>
- EBSCO
- CINAHL Plus with Full-text
- Scopus
- Econolit
- EBSCO Business Source Complete
- PsychInfo

Database searches will combine terms from two themes:1) Caribbean and 2) nurse retention/turnover. Keywords such as "nurse", "retention", "turnover", "Caribbean" and "West Indies" will be used alone and in combination in the title and/or abstract and subject headings as appropriate.

Inclusion criteria and exclusion criteria for the Peer Reviewed and Grey Literature

1. <u>Peer reviewed literature</u> meeting the following criteria will be included in our study:
- Original reports and secondary literature (e.g. systematic or scoping reviews, meta-analysis or meta-synthesis).
- Full texts must be available in the English or Spanish.
- Studies samples must be Caribbean nurses. Studies whose sample is not exclusively Caribbean nurses will be included if data are disaggregated and attributable to this population.

The following will be excluded from our study:
- Study protocols.
- Editorials.
- Blogs.

- Opinion pieces.
- Press releases.
- Conference and Symposia proceedings.
- Full text documents/articles not available in the English or Spanish.

Ancestry searches will be conducted on reference lists of all included studies.

2. Grey literature will be retrieved using the following databases and search engine to provide a more comprehensive presentation of the available data:

- ProQuest Dissertations & Theses Global
- OCLC WorldCat Dissertations and Theses
- OCLC Papers First
- Google

Google will be searched for publicly available material using the following search statement "turnover nurses Caribbean site:.org", "retention nurses Caribbean site:.org", "turnover nurses Caribbean site:.gov", "retention nurses Caribbean site:.gov". The "site:.org" will limit retrieval to organizational sites such as Pan American Health Organization (PAHO) and World Health Organization (WHO). The "site:.gov" will limit retrieval to country specific government sites. The Google search engine will also be used to search the International Council of Nurses website and country specific nurses' association and union sites.

Grey literature meeting the following criteria will be included in our study:
- Government reports.
- Policy statements and issues papers.
- Pre-prints and post-prints of articles.
- Theses and dissertations.
- Research reports.
- Newsletters and bulletins.
- Fact sheets
- Opinion pieces
- Press releases
- Conference and Symposia proceedings
- Full text documents/articles available in the English and Spanish
- Editorials

In contrast, neither blogs nor full text documents/articles in languages other than English or Spanish will be included in our scoping review. As mentioned above, no publication date restrictions will be imposed on the peer reviewed or grey literature.

Definitions

The population for our study includes any category of regulated nurses (i.e., Registered Nurse (RN), Registered Midwife (RM), Registered Psychiatric Nurse (RPN), Licensed Vocational Nurse/Licensed Practical Nurse (LVN/LPN) or equivalent). Nursing students, nurses aides, nursing assistants, patient care technicians or their equivalents will be excluded.

The setting for our study is the Caribbean/West Indies and includes any of the 13 independent countries in the region (i.e., Antigua and Barbuda, Bahamas, Barbados, Cuba, Dominica, Dominican Republic, Grenada, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Trinidad and Tobago).

Turnover includes voluntary and involuntary turnover. *Voluntary turnover* is initiated by an employee and involves the internal transfer of an employee, or an employee leaving the organization (Price, 1977). Conversely, *involuntary turnover* is not initiated by an employee (e.g. mandatory retirement or dismissal) but involves an employee leaving an organization (Price, 1977).

Stage 3: Selecting the literature

Records of the searches will be imported into a reference-management program RefWorks (University of Alberta Libraries, 2020) where duplicates will be removed. The remaining records will be imported into Covidence - a web-based systematic review manager used for citation screening and full text review (University of Alberta Libraries, 2019).

Screening

We will modify and validate the Covidence screening tool prior to use. First, we will screen titles and abstracts. Second, we will screen full text articles of those retained. Two people will independently screen the first 20 titles and abstracts based on the inclusion/exclusion criteria to establish inter-rater reliability, then continue screening of remaining titles and abstracts. We will jointly screen another 5 every 20 titles, comparing our results. All differences will be resolved by consensus. For full text articles, we will screen the first 20 titles and abstracts based on the inclusion/exclusion criteria to establish inter-rater reliability, then continue screening of remaining titles and abstracts. We will jointly screen another 5 every 20 titles, comparing our results. All differences will be resolved by consensus.

Stage 4: Extracting and charting the data

To ensure standardization of data extraction and charting (Levac et al., 2010) we will use a customized extraction tool that will be used in Covidence. The tool will be validated prior to its

use and modified as necessary. To ensure inter-rater reliability two people will independently extract data from the first 20 records. We will jointly screen another 10 every 50 titles, comparing our results. All differences will be resolved by consensus.

The extracted study details will be recorded in Excel spreadsheets and include: author, year, type of study (e.g. thesis, report, textbook), country, aim/purpose, theoretical framework, population, sample, setting, intervention (where applicable), data collection method (specific quantitative or qualitative), instrument(s) and concept measure(s), reliability and validity of instruments/rigor, data analysis, outcome(s)/finding(s), recommendations and conclusions. Discrepancies will be resolved through thorough review and discussion until consensus is achieved. The PRISMA flow diagram (Moher et al., 2009) will be used to report the number of records throughout the process.

Stage 5: Data summary and synthesis of results

To address the research question, we will use frequencies to report the amount, type, sources, distribution and focus of the literature. We will also conduct a thematic analysis of all studies and reports to explore the key themes within the papers and compare the findings between studies (Braun, 2006) and summarize qualitative data into a narrative synthesis using the major themes identified through an iterative process.

We will identify gaps in the literature and discuss implications for practice or future research. Another team member will review the themes and the final findings (Colquhoun et al., 2014). The quality of the literature will not be appraised as is not indicated for scoping reviews (Arksey & O'Malley, 2005; Pham et al., 2014).

Limitations

Our scoping review may miss relevant records published in other languages by our exclusion of peer reviewed and grey literature reported in languages other than English and Spanish.

Conclusion

The global nursing shortage has been a long-standing issue, forcing stakeholders such as international organizations, country governments and nursing organizations to look for ethical, innovative and cost-effective strategies to recruit and retain nurses. Voluntary or involuntary nurse turnover at the organisational or professional level contributes to the nursing shortage (Dewanto &Wardhani, 2018; Mazurenko et al., 2015). Examining and addressing nurse turnover then is important as empirical studies indicate that higher nurse-patient ratios improve patient outcomes (Aiken et al., 2014). However, nurse turnover literature primarily focuses on countries within North America (particularly the United States), Europe, and Australia (Duffield et al., 2014; Halter et al., 2017; Hayes et al., 2006; Hayes et al., 2012; Leinweber et al., 2016; Li et al., 2013).

Country, work setting, and personal context all matter. A solid understanding of predictors of retention and turnover of all levels of nurses working in various settings in the Caribbean could enable nurse leaders, organizations and policy makers to develop context-specific, feasible, and evidence-based recruitment and retention strategies. Hence, the purpose of this scoping review is to scope a body of literature and identify key themes and knowledge gaps about retention and turnover of nurses working in countries of the Caribbean.

Declaration of Conflicting Interests

The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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