Review
Nurse migration from India: A literature review
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ABSTRACT

Background: A profound nursing shortage exists in India where nurses are increasingly outmigrating to practice nursing in surrounding countries and abroad. This is important globally because countries with the lowest nursing and healthcare workforce capacities have the poorest health outcomes.

Objective: This review sought to synthesize and unify the evidence about nurse migration from India and includes a look at nurse retention within India.

Design: A comprehensive literature review was performed to synthesize and unify both qualitative and quantitative research.

Data sources: Bibliographic databases searched included CINAHL, MEDLINE, PsycINFO, and EConLit using associated keywords for empirical and descriptive literature published between January 2004 and May 2014. Hand searches of the Nursing Journal of India from 2004 to February 2014 and the Journal of Nursing Research Society of India from its inception in 2007–February 2014 were also completed.

Review process: 29 studies were selected and analyzed for the review. Data were appraised for quality; reduced through sub-categorization; extracted; and coded into a framework. Thematic interpretation occurred through comparing and contrasting performed by multiple reviewers.

Results: Findings included an exponential growth in nurse recruitment efforts, nurse migration, and a concomitant growth in educational institutions within India with regional variations in nurse migration patterns. Decision-making factors for migration were based on working conditions, salience of family, and the desire for knowledge, skill, technology, adventure and personal enrichment. Challenges associated with migration included questionable recruiting practices, differing scopes of practice encountered after migration and experiences of racism and cultural differences. A shift toward a positive transformation of nursing status in India has resulted in an increased respect for individual nurses and the profession of nursing. This was attributed to the increased globalization of nursing.

Conclusions: Results from this review can be used to shape health policy and advocate for nursing reform in India. As India’s healthcare infrastructure continues to evolve, effective programs to improve conditions for nurses and retain them in India are needed. Additionally, as the globalization of nurses increases, more research is needed to develop effective programs to aid in a smooth transition for nurses who migrate from India.

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What is already known about the topic?

- A profound nursing shortage exists in India and nurses in India are increasingly migrating from India to practice nursing in other countries.
- Nursing has been traditionally viewed as a low status position in India, contributing to the nursing shortage.
- Push and pull factors have been previously associated with nurse migration from India. Push factors include limited opportunity for professional development and unsafe working conditions in India. Pull factors are described as incentives for migration including better salaries and improved working environments.

What this paper adds

- Migration and recruitment of nurses from India has grown exponentially, resulting in an increase of nursing educational institutions in India.
- A new emphasis on the importance of family in the migratory decision-making process and the desire for adventure and personal enrichment has emerged.
- Transitional challenges with migration are prominent and highlight the need for future research to develop and study programs to ensure a more effective transition for nurses who migrate from India.
- A gap in research exists regarding effective programs to retain nurses in India.
- The increased globalization of nurses has increased the perceived status of nursing in India and better positions nurses to advocate for effective nurse retention programs.

1. Background

A significant nursing shortage exists in India where nurses are increasingly migrating to practice nursing abroad (Walton-Roberts, 2012). According to Senior (2010), 2.4 million more nurses were needed to fulfill nursing workforce capacity needs in India for 2012. Nations with the lowest healthcare workforce capacities have the highest mortality rates and the poorest health outcomes (Senior, 2010). India ranks among the top 50 countries for highest infant mortality rates where 25% of all neonatal deaths in the world occur each year (Bhakoo and Kumar, 2013; Central Intelligence Agency, 2014).

The nursing shortage in India has been largely attributed to the historical stigmatization associated with the work of nurses (Nair, 2012). The provision of nursing care involves touching strangers from the opposite sex and contact with bodily fluids. This type of work was perceived as promiscuous and polluting among Hindu traditionalists, the predominant religion practiced in India, and was reserved for those from lower caste positions or those with limited economic resources (Johnson et al., 2014; Reddy, 2008). Researchers have largely reported this stigmatization as a “push factor” for nurse migration from India (Walton-Roberts, 2010). Although caste discrimination is no longer legal in India, cultural stigmas are complex and are not easily erased (Sweas, 2013). However, a positive shift in the perception of nursing as integral to the healthcare system is beginning in India. The draft national healthcare policy for India was recently released for public comment recognizing that nurses make up 2/3 of the workforce in India, and calling for the emergence of nurse leaders to improve patient care and nursing education in India (Ministry of Health, 2015). Although these recent changes in the Indian healthcare system have resulted in vast improvements, India is not on target to meet the World Health Organization millennium development goals for 2015 (Bhakoo and Kumar, 2013).

The push and pull theory of nurse migration was prevalent in literature in previous years (Alonso-Garbayo and Maben, 2009; Kline, 2003; Mejia et al., 1979). Mejia et al. (1979) theorized push forces as factors contributing to out-migration, particularly from low and middle-income countries. Push factors included limited opportunities for professional development and unsafe working conditions, whereas pull factors were described as incentives for migration, such as better salaries, and improved working conditions (Kline, 2003). However, Prescott and Nichter (2014) challenged the application of this theory and suggested a broader approach is needed to understand the complexities of the political, economic, and sociocultural dynamics of nurse migration. Prescott and Nichter (2014) contended push and pull theories focus on individual decision-making rather than the global context of migration. Widening the lens to examine the issue of nurse migration from and retention within India will capture the global implications and provide the researcher with supplementary tools for health policy development. The WHO (2010) called for its member states to develop health migration policy based on research. The changing political, social, economic, religious, and cultural climate in India significantly influences the nursing shortage and nurse migration (Johnson et al., 2014; Walton-Roberts, 2010, 2012). A literature review is needed to contextualize and synthesize the evidence, identify gaps in the literature, and determine essential research needs that can be used for health policy development on the migration, recruitment, and retention of nurses in India. According to Biswakarma (2012), attraction and retention of nurses is central to addressing the health workforce shortage in India. The primary purpose of this literature review is to synthesize and unify the growing body of descriptive and empirical research on nurse migration from India, including nursing recruitment and retention within India.

2. Methods

The research team was comprised of two nurse researchers with experience in international collaborations, international research, nursing workforce regulatory standards and policy, and publication and one medical librarian experienced in conducting nursing literature searches. In addition, the first author’s research trajectory includes the study of the phenomenon of global nurse migration with a focus on India, and includes more than 600 h over the last four years conducting faculty development workshops and nursing research in India. Dearholt and Dang (2012) emphasize the importance of
contextual experience by the research team when conducting reviews.

2.1. Design

A literature review was conducted to synthesize the descriptive and empirical evidence on nurse migration from India. According to Whittemore and Knafl (2005), it is important to synthesize empirical literature to provide a more complete understanding of a phenomenon in an effort to advance nursing science and inform initiatives related to research, practice or policy. This review method allows for “inclusion of diverse methodologies” (Whittemore and Knafl, 2005, p. 547) which are common in the research on nurse migration.

2.2. Search strategy

The researchers met several times in the spring of 2014 to discuss a retrieval process that would best elicit data from a wide range of Indian national and international sources. The primary electronic literature search was conducted in April and May 2014. Bibliographic databases selected to capture a variety of sources for the search included: CINAHL (1981–present); MEDLINE (1946–present); PsycINFO (1887–present); and EconLit (1969–present). While the CINAHL database had a thesaurus rich in subject headings dealing with nurses, foreign nurses, nursing as a profession, emigration and immigration, immigrants, foreign professional personnel, and India as both a geographic and political entity, MEDLINE was not as robust in terminology relating to nurses or nursing concepts. PsycINFO and EconLit had subject headings dealing with immigration, emigration and the geographic and political India but had relatively few terms addressing the nursing concepts. Consequently, it was decided to run the search in each database using text words describing nurses, the nation of India and its specific states or provinces, immigration/emigration (the Medical Subject Headings to be used for capturing literature on migration), brain drain, pull push, recruitment, retention and attrition. The strategy was formulated to emphasize sensitivity (generate the largest possible amount of results) rather than specificity (generate fewer, more precise results). A hand search of all issues of the Nursing Journal of India from 2004 to February 2014 and the Journal of Nursing Research Society of India from its inception in 2007–February 2014 was also completed.

Searches were limited to articles in English (the predominant language used in Indian and international nursing journals) from January 2004 to May 2014 to capture the most current (past 10 years) research. Descriptive and empirical research studies published as journal articles, books, and dissertations were included in the selection. To limit the search to descriptive and empirical studies, non-systematic reviews, commentaries, news items, anecdotes and letters were excluded. Contextually irrelevant articles such as those dealing with U.S. Native Americans, Asian Indian patients, nursing school retention or attrition were also eliminated.

2.3. Data coding and synthesis

The data were synthesized from June 2014 to December 2014 using the review framework developed by Whittemore and Knafl (2005). Data reduction involved sub categorization by types and quality of research (quantitative, qualitative, case studies, and JHEBP appraisal), population (nurses), participant characteristics (gender and age) and context (migration, recruitment, retention). Next, data were extracted and coded to streamline and structure them into a framework (Whittemore and Knafl, 2005). Thematic interpretation occurred through the repetitive process of comparing and contrasting the data to identify and unify similarities and differences, patterns, meaningful concepts, and strategies. Finally, conclusions were drawn and verified with primary sources for trustworthiness (Whittemore and Knafl, 2005).

3. Results

The initial electronic database search yielded an expectedly large amount of literature with 5086 resulting total hits: CINAHL 874, MEDLINE 2402, PsycINFO 1765, and EconLit 45. Initially, 654 duplicates between databases were excluded. Further screening of title and abstract for exclusion criteria reduced the breadth of studies to 134. After detailed examination of these full texts, it was determined 27 journal articles, one dissertation, and one book met inclusion criteria. The hand search of issues of the Nursing Journal of India and the Journal of Nursing Research Society of India did not return any studies that met inclusion criteria for selection. An overview of the 29 selected studies with a description of the study purpose, sample, setting, design and methods is provided in Table 1. Fig. 1 demonstrates the search strategy from beginning to end.

3.1. Study characteristics

Of the 29 selected studies, designs included qualitative (n = 19), descriptive quantitative (n = 8), and mixed methods (n = 2). All selected studies were non-experimental and all studies assessed nurse participants from India as a sample or subsample. Nineteen studies reported gender of participants, which was predominantly female ranging from 70% to 100%. Age of participants was indicated in 15 studies and ranged from 18 to 65 years. Thematic interpretation resulted in four themes and multiple subthemes, delineated in Table 2, and described narratively. Table 1 also provides a visual of how each study fits into the thematic interpretation for this review.

3.2. Theme one: exponential growth

The growth in migration trends among nurses from India has proliferated in recent years. This growth has been attributed to the increased global demand for nurses, which has subsequently created a surge in international recruitment efforts. The increased migration of nurses from certain geographical areas in India
Table 1
Summary of selected studies.

<table>
<thead>
<tr>
<th>Authors &amp; year</th>
<th>Purpose</th>
<th>Participants &amp; setting</th>
<th>Design &amp; methods</th>
<th>Themes*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alonso-Garbayo and Maben, 2009</td>
<td>Examine factors related to nurses’ decision to migrate to the United Kingdom.</td>
<td>Nurses (n = 21) recruited from India (n = 6) and Philippines to work in one National Health Service acute trust in London.</td>
<td>Qualitative interpretive approach. Longitudinal and cross-sectional interviews.</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Bhattacharyya et al., 2011</td>
<td>Assess Indian out-migration of health professionals to European Union.</td>
<td>Indian nurses migrating to the United Kingdom.</td>
<td>Quantitative descriptive and case study approach.</td>
<td>✓</td>
</tr>
<tr>
<td>Biswakarma, 2012</td>
<td>Examine distribution, recruitment and retention of physicians and nurses in North East India.</td>
<td>Nurses (n = 7) and physicians (n = 4) from 5 rural health facilities in North East India and informants from the state health official (n = 1) in Arunachal Pradesh.</td>
<td>Qualitative in-depth interviews</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Bland and Woolbridge, 2011</td>
<td>Describe elements that aid in a safe passage for nurses migrating from India to New Zealand.</td>
<td>Nurses (n = 10) who participated in the Chandigarh, India campus of the University College of Learning in Pamerston North, New Zealand.</td>
<td>Qualitative inquiry informed by participatory action research</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>Blythe and Baumann, 2009</td>
<td>Provide a profile of internationally educated nurses in Ontario, Canada.</td>
<td>2007 and 2008 College of Nurses of Ontario statistical reports on internationally educated nurses.</td>
<td>Quantitative descriptive</td>
<td>✓</td>
</tr>
<tr>
<td>DiCicco-Bloom, 2004</td>
<td>Explore interrelationships &amp; immigration status of nurses from Kerala, India practicing in New Jersey and Pennsylvania, United States.</td>
<td>Nurses (n = 10) born and educated in Kerala, India who were employed in the United States.</td>
<td>Qualitative semi-structured interviews.</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Francis et al., 2008</td>
<td>Assess &amp; evaluate approaches, incentives, &amp; retention strategies used to recruit nurses from abroad.</td>
<td>Recruiting personnel (n = 8) &amp; RNs (n = 18) recruited from India (n = 8), UK, Zimbabwe, Holland, Singapore, &amp; Malaysia at 4 rural hospitals in Australia.</td>
<td>Qualitative exploratory descriptive</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Hawkes et al., 2009</td>
<td>Highlight drain on India’s nursing workforce due to circular migration.</td>
<td>Nurses (n = 99) employed at a one private hospital in Kerala, India.</td>
<td>Quantitative descriptive</td>
<td>✓</td>
</tr>
<tr>
<td>Humphries et al., 2009</td>
<td>Assess future migration intentions of migrant nurses in Ireland.</td>
<td>Migrant nurses (n = 21) predominately based in Dublin, Ireland and surrounding area from India (n = 4) and other countries.</td>
<td>Qualitative in-depth interviews using inductive analysis</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Johnson et al., 2014</td>
<td>Explore Indian nurses’ experiences of entry into practice and the importance of migration for nurses’ individual careers.</td>
<td>Nurses and student nurses (n = 56) from 6 sites in Bangalore, India.</td>
<td>Qualitative interview/grounded theory method</td>
<td>✓ ✓</td>
</tr>
<tr>
<td>Jose, 2011</td>
<td>Describe lived experiences of internationally educated nurses who work in urban United States.</td>
<td>IENs (n = 20) from the Philippines, Nigeria and India (n = 7) practicing in a multi-hospital medical center in southwest United States.</td>
<td>Qualitative psychological phenomenological method</td>
<td>✓</td>
</tr>
<tr>
<td>Khadria, 2007</td>
<td>Describe practice of international recruitment of Indian nurses.</td>
<td>Reports from the Commission on Graduate Foreign Nursing Schools and nurse recruitment agencies in New Delhi, Bangalore, and Kochi.</td>
<td>Quantitative descriptive using questionnaires and informal interviews</td>
<td>✓</td>
</tr>
<tr>
<td>Nair, 2012</td>
<td>Locate life strategies of nurses from Kerala, India in context of the evolving labor market.</td>
<td>Nurses (n = 150) employed in public and private hospitals and nursing homes in Delhi, India.</td>
<td>Field based qualitative interviews using ethnographic techniques</td>
<td>✓ ✓ ✓ ✓</td>
</tr>
<tr>
<td>O’Brien and Ackroyd, 2012</td>
<td>Describe assimilation of internationally educated nurses into the National Health Services hospitals in the United Kingdom.</td>
<td>IENs (n = 63) from India (n = 3 of 7 cohorts), Philippines, and Spain and nurse managers and home nurses practicing in United Kingdom.</td>
<td>Qualitative comparative case study approach using observation and semi-structured interviews.</td>
<td>✓ ✓ ✓</td>
</tr>
<tr>
<td>Percot, 2006</td>
<td>Present evolution of nurse migration strategy from Kerala to the Gulf.</td>
<td>Nurses and student nurses from India (n = 286) practicing in the Gulf or South India.</td>
<td>Qualitative open ended interviews and fieldwork</td>
<td>✓ ✓ ✓</td>
</tr>
</tbody>
</table>

has resulted in regional variation in nurse migration patterns and an increased demand for nursing education programs/schools (Blythe and Baumann, 2009; Spetz et al., 2014).

### 3.2.1. Nurse recruitment efforts and migration trends

A surge among international recruitment efforts targeting nurses in India was prominent in the literature (Bhattacharyya et al., 2011; Khadria, 2007; Percot, 2006; Ereun, 2013).

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<table>
<thead>
<tr>
<th>Authors &amp; year</th>
<th>Purpose</th>
<th>Participants &amp; setting</th>
<th>Design &amp; methods</th>
<th>Themes*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pittman et al., 2010</td>
<td>Assess internationally educated nurses migratory recruitment patterns and issues.</td>
<td>Executives (n = 20) from IEN recruitment companies, IENs in New York City (n = 2 focus groups) &amp; recruitment websites.</td>
<td>Qualitative and descriptive quantitative from secondary data sources</td>
<td>✓</td>
</tr>
<tr>
<td>Ramani et al., 2013</td>
<td>Compare perspectives of students and health workers toward rural service and retention in India.</td>
<td>Health students and in-service personnel (n = 88) including nursing students (n = 12) and nurses (9) in Uttarakhand and Andhra Pradesh, India.</td>
<td>Qualitative in depth interviews</td>
<td>✓</td>
</tr>
<tr>
<td>Rao et al., 2013</td>
<td>Identify policy options for increasing the availability of clinical providers in rural India.</td>
<td>Medical and nursing student and in-service personnel (n = 746) including nursing students (n = 132) nurses (n = 232) in primary health centers in India.</td>
<td>Quantitative questionnaires using Discrete Choice Experiment methodology</td>
<td>✓</td>
</tr>
<tr>
<td>Reddy, 2008</td>
<td>Historicize Indian nurse migration to the United States.</td>
<td>First generation female nurses (n = 15) who migrated from India to practice in the United States.</td>
<td>Qualitative historical analysis and interviews</td>
<td>✓</td>
</tr>
<tr>
<td>Ross et al., 2005</td>
<td>Predict international migration of nurses to the United Kingdom.</td>
<td>Reports from the Nursing and Midwifery Council of the United Kingdom.</td>
<td>Qualitative descriptive and regression model</td>
<td>✓</td>
</tr>
<tr>
<td>Sherman and Eggenberger, 2008</td>
<td>Investigate educational and support needs of internationally recruited nurses to the United States.</td>
<td>Internationally educated nurses (n = 21) from 7 countries including India (n = 9) practicing in the US and nurse managers (n = 10) with recent experience supervising new IENs.</td>
<td>Qualitative semi-structured interviews</td>
<td>✓</td>
</tr>
<tr>
<td>Spetz et al., 2014</td>
<td>Describe the internationally educated nurses workforce including salary disparities in the United States.</td>
<td>2006 US Bureau of Health Professions statistics and 2008 National Sample Survey for Registered Nurses.</td>
<td>Quantitative descriptive and multivariate analysis</td>
<td>✓</td>
</tr>
<tr>
<td>Sundararaman and Gupta, 2011</td>
<td>Analyze approaches to retaining skilled health workers in rural India.</td>
<td>Report by the State Programme Implementation Plans of National Rural Health Mission in India.</td>
<td>Quantitative descriptive</td>
<td>✓</td>
</tr>
<tr>
<td>Thekdi et al., 2011</td>
<td>Examine transitional challenges of internationally educated nurses in the United States.</td>
<td>Clinical educators (n = 4), clinicians (n = 4) and internationally educated nurses (n = 6) from India, Haiti, Philippines and United Kingdom working in the United States healthcare system.</td>
<td>Qualitative interviews</td>
<td>✓</td>
</tr>
<tr>
<td>Thomas, 2006</td>
<td>Identify factors responsible for out migration of nurses from India.</td>
<td>Nurse practitioners, nurse educators, nursing administrators (n = 448) in Delhi, India.</td>
<td>Quantitative correlational using questionnaires</td>
<td>✓</td>
</tr>
<tr>
<td>Tregunno et al., 2009</td>
<td>Examine the experience of internationally educated nurses who entered Ontario workforce between 2003 and 2005</td>
<td>Internationally educated nurses (n = 30) from 20 countries including India (n = 2) who received their initial registration in Canada in 2003–2005.</td>
<td>Qualitative constant comparative methods using semi structured interviews</td>
<td>✓</td>
</tr>
<tr>
<td>Walters, 2008</td>
<td>Explore experiences of internationally educated nurses within the Australian nursing system.</td>
<td>Internationally educated nurses (n = 16) from South Asia (including India) working in an Australian public mental health facility.</td>
<td>Qualitative narrative analysis</td>
<td>✓</td>
</tr>
<tr>
<td>Xiao et al., 2014</td>
<td>Examine relationships of hosts and internationally educated nurse actions and social structures and workforce integration in the hospital settings.</td>
<td>Internationally educated nurses (n = 24) including India (n = 8) and senior nurses (n = 20) practicing in Australian metropolitan city.</td>
<td>Qualitative double hermeneutic method using focus group &amp; individual in-depth interviews</td>
<td>✓</td>
</tr>
</tbody>
</table>

*Themes: (A) Exponential growth, (B) decision making factors, (C) challenges of nurse migration, (D) transformation of status.
Pittman et al., 2010; Ross et al., 2005; Spetz et al., 2014). Pittman et al. (2010) detailed a tenfold growth of U.S. based nurse recruitment companies between 1990 and 2007. More than 273 U. S. nurse recruitment companies existed in 2007, with a primary focus on recruiting nurses from the Philippines and India. Sixty-eight of those companies reported active recruitment strategies targeting India, despite its critical nursing shortage. These numbers do not reflect the many hospital and other private healthcare companies who also recruit nurses from India (Pittman et al., 2010). According to Bhattacharyya et al. (2011), aggressive recruitment and subsequent placement of Indian nurses was the most prominent factor contributing to the growth of nurse migration from India to the United Kingdom. The literature indicated one factor influencing the upsurge in recruitment stems from the need for nurses to care for the rapidly growing aging population (Percot, 2006). The number of Indian recruitment agencies strategically aligning with United States recruitment agencies has also expanded since 2004, recruiting nurses around the Delhi area (Northern India); while the Gulf countries, New Zealand, Singapore, Australia, Ireland and the UK recruit mainly from Kochi and Bengaluru (Southern India) (Khadria, 2007). Despite India’s low nursing workforce capacity, some Indian hospitals are also profiting from the international demand, aligning with recruitment agencies to train and educate nurses to take the foreign nurse licensure exams (Khadria, 2007).

### 3.2.2. Regional variation in nurse migration patterns

While most migrating nurses from India choose countries closer to their home, the migration to further geographical regions is on the rise (Blythe and Baumann, 2009; Percot, 2006; Ross et al., 2005; Spetz et al., 2014). In 2004, only 1,271 RNs educated in India were practicing in the United States, but by 2008, the number rose to 15,827 (more than 12 times the 2004 count) comprising 9% of the internationally educated nurses workforce (Spetz et al., 2014). Blythe and Baumann (2009) reported nurses from India were the third most prevalent internationally educated nurses practicing in Canada in 2008 while Bland and Woolbridge (2011) cited Indian nurses as constituting the largest sector of internationally educated nurses entering New Zealand in 2009 and 2010. Although national licensure and immigration policy has resulted in an ebb and flow of migration from year to year to some countries, particularly in the United Kingdom and United States, overall nurse migration from India continues to increase (Bhattacharyya et al., 2011; Spetz et al., 2014).

Johnson et al. (2014) reported that a “medical hub” of private, governmental, research and specialized healthcare facilities is located in Bengaluru, the 3rd largest city in India found in the southern state of Karnataka, where many new nursing colleges have sprung up as an economic response to the international demand for nurses from India (p. 737). The growing disproportion of nursing schools in urban southern India has caused a regional influx, resulting in nursing shortages reported in the North (Nair, 2012) and in rural areas (Sundararaman and Gupta, 2011). Studies also reported this disproportion contributed to migration that occurs in stages (Bhattacharyya et al., 2011; Nair, 2012; Walton-Roberts, 2010). Percot (2006) estimated almost half of the nurse migrants practicing in the Gulf originated from Kerala (a southern state in India), while the Gulf States (in the north) may be seen as a stepping-stone to practicing in the West. The excess of newly graduated nurses in the Southern region has been generalized as an excess of nurses in India by some authors. Alonso-Garbayo

### Table 2

<table>
<thead>
<tr>
<th>Themes</th>
<th>Subthemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exponential growth</td>
<td>Nurse recruitment efforts &amp; migration trends</td>
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<td>Regional variation in nurse migration patterns</td>
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<tr>
<td>Decision making factors</td>
<td>Work conditions</td>
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<tr>
<td></td>
<td>Salience of family</td>
</tr>
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<td></td>
<td>Knowledge, skill and technology</td>
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<td></td>
<td>Adventure and personal enrichment</td>
</tr>
<tr>
<td>Challenges of nurse migration</td>
<td>Questionable recruiting practices</td>
</tr>
<tr>
<td></td>
<td>Differing scope of practice</td>
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<td></td>
<td>Cultural differences and racism</td>
</tr>
<tr>
<td>Transformation of status</td>
<td>Transformation of the individual</td>
</tr>
<tr>
<td></td>
<td>Transformation of the profession</td>
</tr>
</tbody>
</table>

**Fig. 1.** Search results.

and Maben (2009) explained nurses from India were recruited to the United Kingdom because a “reported surplus” existed (p. 1). However, the majority of studies emphasized a significant overall nursing workforce gap exists in India (Biswakarma, 2012; Hawkes et al., 2009; Khadria, 2007; Ramani et al., 2013; Rao et al., 2013; Sundararaman and Gupta, 2011).

3.3. Theme two: decision making factors

Many factors were explicated in the literature to describe reasons contributing to nurses’ decisions to migrate from India. While decisions to migrate were made on an individual level, the wide breadth of research with similar findings suggests these factors are not specific to individuals, but point to national and international issues. Workforce disparities, family issues, and a desire for new knowledge, skill, technology and personal enrichment were found to play a part in the decision making process.

3.3.1. Work conditions

A range of nursing workforce disparities in India is disseminated in the research and are cited as factors contributing to migration, including: low salary (Alonso-Garbayo and Maben, 2009; Biswakarma, 2012; Bland and Woolbridge, 2011; Johnson et al., 2014; Nair, 2012; Rao et al., 2013; Sundararaman and Gupta, 2011; Thomas, 2006), poor worksite resources and conditions (Alonso-Garbayo and Maben, 2009; Biswakarma, 2012; Bland and Woolbridge, 2011; Nair, 2012), threatened physical safety (Biswa karma, 2012; Nair, 2012; Ramani et al., 2013), and nursing’s perceived low-status position (Alonso-Garbayo and Maben, 2009; Nair, 2012; Thomas, 2006). The historical perception of nursing as a low caste position in India contributed to the nurses’ desire to migrate to countries where nursing was perceived as a highly respectable and desirable profession (Nair, 2012). Thomas (2006) explained income as a predominant decision-making factor for international migration in a quantitative study surveying 448 nurses from Delhi, India. Eighty-nine percent of nurses in the lower income bracket expressed intent to migrate abroad as compared to 34% of those in the highest income bracket. Reported monthly salaries for nurses in India ranged from 2500 to 11,000 rupees per month (Percot, 2006), which is equivalent to approximately 41–182 United States dollars or 31–138 euros. Salary has been addressed somewhat in India as a retention strategy. An allocation of slightly higher salaries in both rural (Biswakarma, 2012; Ramani et al., 2013; Rao et al., 2013; Sundararaman and Gupta, 2011) and governmental (Nair, 2012) facilities was described in the literature as a strategy to address the nursing shortage in India.

Poor working conditions primarily noted by nurses included improper nurse to patient ratios, lack of support staff, and inadequate healthcare technology (Bland and Woolbridge, 2011; Nair, 2012; Ramani et al., 2013). However, it was noted conditions in some Indian urban facilities were preferable to rural centers where poor living accommodations with no electricity, cellular or internet connections were reported (Biswakarma, 2012). Living accommodations for nurses are of primary importance in India, as a risk to personal physical security, particularly for women, is a threat (Ramani et al., 2013). Contextual application of safety for nurses in a qualitative study of 88 participants included concepts of physical security and legal protection from political oppression (Ramani et al., 2013). Although most authors did not elaborate on the intricacies of the identified safety threats to nurses, Nair (2012) was the exception. Nair (2012) detailed a theme of sexual harassment of nurses in India from patients, families, physicians, colleagues, and staff, explaining its relationship with the low societal perception of women, because their work involves touching strangers of the opposite sex, and night work, which has been culturally associated with promiscuity in India. Nair’s discourse linked these common nursing activities to a societal perception of nursing as menial work reserved for those with low morality, making them more vulnerable to sexual harassment and safety threats. Other sources also detailed the perception of nursing as a low status gendered position in India (Alonso-Garbayo and Maben, 2009; Thomas, 2006). The rape and torture of a 19-year-old nurse by a staff member in an Indian hospital in 2003 led to a public uprising to advocate for the safety of nurses (Nair, 2012). However, Nair (2012) emphasizes hospital actions to prevent sexual harassment are motivated by the desire to avoid bad media publicity stating, “the safety of the nurses is secondary” (p. 72).

3.3.2. Salience of family

The importance of family played a crucial role in decisions to migrate among Indian nurse participants in the literature. Participants in the studies expressed desires to: join family members who were already migrated or had plans to migrate (DiCicco-Bloom, 2004; Percot, 2006; Reddy, 2008); better the life of their families both at home and abroad (Humphries et al., 2009; Thomas, 2006); or secure family by improving their marriage prospects through migration (Johnson et al., 2014; Percot, 2006). Alonso-Garbayo and Maben (2009) described family members as “influential actors” when nurses make decisions to migrate (p. 6). Callister et al. (2011) conveyed that 76% of nurses entering New Zealand from 2006 to 2007 arrived with family members. Familial benefits of out-migration included the ability to send remittances to family members in their home countries, a stable life, better educational opportunities for their children, or the ability to save money for their dowries, which is a common practice integral to marriage in India (DiCicco-Bloom, 2004; Humphries et al., 2009; Johnson et al., 2014; Percot, 2006; Thomas, 2006).

3.3.3. Knowledge, skill, and technology

The acquisition of new knowledge and skills and the opportunity to use advanced technology in nursing were reported as playing a role in the migratory decision-making process (Alonso-Garbayo and Maben, 2009; Bland and Woolbridge, 2011; Francis et al., 2008; Humphries et al., 2009; Johnson et al., 2014; Nair, 2012; Thomas, 2006). Ongoing research and advanced career opportunities in other countries, such as being assigned as a mentor for other nurses once experience was gained, were
valued by nurses studied (Alonso-Garbayo and Maben, 2009; Nair, 2012). Health-related technologies were discussed in terms of their increased accessibility abroad and the prospect of learning their use (Bland and Woolbridge, 2011; Johnson et al., 2014). Humphries et al. (2009), indicated these factors played a more significant role than financial incentives among interviewed nurses who had migrated to Ireland, where the cost of living was reported as higher than expected.

3.3.4. Adventure and personal enrichment

Descriptive as anticipated adventure, experiencing a new or modern world, excitement, and enrichment were used to describe motivations for migration and intent to migrate among the nurses surveyed in India (Alonso-Garbayo and Maben, 2009; Johnson et al., 2014; Francis et al., 2008; Nair, 2012; Percot, 2006). Nair (2012) interviewed a nurse who expressed desire to travel and learn a new language to further enrich her life. The vision of capturing the essence of this outside world that are yet to encounter is illustrated by a participant in Percot’s (2006) study. The nurse stated, “So, we Malayalis feel a little bit as if the world was ours and that Kerala was only the centre of it!” (p. 45). Francis et al. (2008) reported the anticipated adventure was compared to their current circumstances, which they described as “dull and not stimulating” (p. 168).

3.4. Theme three: challenges of nurse migration

Nurses described a variety of challenges with migration. These challenges were often complex and occurred before, during and after the migratory process. Unethical recruiting practices by aggressive recruiters, becoming familiar with a differing scope of practice in a new country, and experiences of cultural differences and racism were identified in the literature reviewed.

3.4.1. Questionable recruiting practices

Questionable and sometimes non-reputable recruiting practices by recruiting and healthcare agencies were reported in the literature and cited as contributors to anxieties and problems for nurses who migrated from India (Alonso-Garbayo and Maben, 2009; Jose, 2011; O’Brien and Ackroyd, 2012; Percot, 2006; Pittman et al., 2010; Walters, 2008; Xiao et al., 2014). Participants in studies voiced the need for more help from recruiters in navigating the process of immigration which proved to be more time consuming and costly than expected (Jose, 2011). O’Brien and Ackroyd (2012) noted dissatisfaction with the recruitment process was a result of the differing expectations between the migrating internationally educated nurses and that of the host facilities, which had not been adequately communicated to the internationally educated nurses. Deception related to salary and high payments to recruiting companies were among the most unethical recruiting practices. Percot (2006) reported an instance in which a company did not disclose that 30% of the Indian nurse’s salary must be relinquished to the host contractor, and additionally, the final contract included no paid holidays for three years. In a study where 20 executives from United States-based international nurse recruiting agencies and two focus groups of internationally educated nurses from India were interviewed, it was reported that most recruiters charged only the receiving facilities for their service (the professional standard), however a few internationally educated nurses reported they were also charged for the service (Pittman et al., 2010). Recruiters interviewed in this study reported knowledge of some “unscrupulous” practices such as dishonesty among a subset of agencies, and advocated for reporting mechanisms to ameliorate this problem (Pittman et al., 2010). Walters (2008) supported this finding in a study in which nurses reported fly-by-night recruiting agencies that took the nurses’ money and then disappeared. One nurse in the study stated, “A lot of people are cheated by agents. . . During that interview process, so many people got cheated like that. Even one of my friends also (was) cheated like that, so I was also (a) bit confused” (Walters, 2008, p. 98).

3.4.2. Differing scope of practice

A differing scope of nursing practice between India and host countries was a common thread that contributed to struggles during transition for nurses after migration (Francis et al., 2008; Jose, 2011; O’Brien and Ackroyd, 2012; Sherman and Eggenberger, 2008; Theddi et al., 2011; Tregunno et al., 2009; Walters, 2008; Xiao et al., 2014). Specifically, differences in tasks for which the nurses were responsible were noted (Francis et al., 2008; O’Brien and Ackroyd, 2012). For example, personal hygiene is a task nurses are expected to perform for patients in many countries; however, due to extremely high nurse-to-patient ratios in India (up to 1:60), these tasks are typically delegated or performed by the patient’s family members (Francis et al., 2008; Xiao et al., 2014). Sherman and Eggenberger (2008) recounted the story of a nurse from India who was not accustomed to touching the “private parts” of men, and felt ashamed to tell her husband about the difference in practice in the United States (p. 542). Additionally, nurses had difficulty transitioning from specialty training (such as midwifery) to practicing on a general unit (Francis et al., 2008); and in some instances, were expected to transition from general to specialties such as intensive care in the host countries (Xiao et al., 2014). High acuity, advanced technology and lack of family involvement with time-consuming patients were also differences cited (Jose, 2011; Sherman and Eggenberger, 2008; Tregunno et al., 2009). Learning the practice of risk reduction through documentation in countries that were more litigious, and newfound autonomy were noted as difficult hurdles to overcome (Sherman and Eggenberger, 2008; Tregunno et al., 2009). Although assessment is part of the curriculum in India, nurses reported a lack of opportunity to practice this skill in India, and needed opportunities to hone this skill to effectively practice in the host country (Sherman and Eggenberger, 2008).

3.4.3. Cultural differences and racism

Cultural differences explicated in the literature surrounded language and communication, in addition to dissimilarities in social and religious practices (Bland and Woolbridge, 2011; Francis et al., 2008; Jose, 2011; O’Brien...
The increased demand for nurses and globalization of the profession has resulted in a positive shift in the perception of nursing in India. While cultural stigmas are difficult to overcome, reports found in the literature suggested their international migratory experiences improved their perceived status on both an individual and professional level. This transformation is described in the subthemes.

3.5.1. Individual transformation

Despite the historical stigma associated with nursing as a low status, predominately female gendered position in India, nurses who migrated outside of India increasingly reported their migrant status gave them greater respect, transforming their individual status as perceived by others in India (Alonso-Garbayo and Maben, 2009; Johnson et al., 2014; Nair, 2012; Percot, 2006). One nurse stated, “when I go back everybody will have that feeling that I am coming from abroad and all will respect me” (Alonso-Garbayo and Maben, 2009, p. 6). Experience abroad gave nurses increased opportunities for advanced positions such as faculty or supervisor upon returning to India (Johnson et al., 2014). In addition, a position in nursing was increasingly associated with a guarantee of employment, and the increased salary abroad was thought to enhance marriage prospects for women, which was highly valued among female participants (Johnson et al., 2014).

3.5.2. Transformation of the profession

Contemporary empirical literature suggests the globalization of nurses has begun to improve the perception of the nursing profession-at-large among society in India (Alonso-Garbayo and Maben, 2009; Bland and Woolbridge, 2011; Johnson et al., 2014; Nair, 2012; Percot, 2006). Percot (2006) indicated students from social backgrounds such as Hindu and Muslim, whose members did not historically choose nursing as a career, are entering nursing in greater numbers because of the technological aspects of the profession and opportunities to migrate abroad. Bland and Woolbridge (2011) expound on nurses’ perceptions that their experiences in New Zealand would help them improve standards of practice at home, therefore transforming the nursing profession as a whole to a profession with increased status and respect.

4. Discussion

4.1. Synthesis of the evidence

The phenomenon of nurse migration from and within India is complex; however, key themes were derived from the contemporary literature synthesized and appraised in this review. These themes add new insight to the body of nursing knowledge on this multifaceted issue. The intense focus on India and its role within the phenomenon of the globalization of nurses provides a more critical contextual view that can be used as a platform for future research, theory development, improvement of global nursing practice and development of health policy. While four distinct themes and multiple subthemes were identified through this review, an intersection between some themes was evident and is described.

4.2. Exponential growth and the transformation of status

While a connection could be drawn between the exponential increase in nurse recruitment and migration in recent years and the nursing shortage in India, this research synthesis highlights the global demand for nurses is beginning to change attitudes about the perceived status of nurses in India and has contributed to growing diversity in the nursing workforce within India. A paradoxical relationship between nurses leaving India to practice nursing abroad and a newfound perceived respect from society for returning nurses within India exists, leading to increased enrollment in nursing programs, particularly in the south (Johnson et al., 2014). Global opportunities offered to migrating nurses have, in part, offset the stigmatization associated with nursing work in India (Johnson et al., 2014; Percot, 2006; Reddy, 2008; Walton-Roberts, 2012). Perhaps the opportunities afforded to migrating nurses combined with the gains India has made to reduce caste discrimination within recent years are beginning to dissuade the pervasive belief among society in India that nursing is a low-status position. In addition, the recent shift toward a positive transformation of the status of nurses is beginning to refute the historical cultural belief in India that nurses are immoral, as evidenced by increased diversity among nurses from the majority religions in India. It is still unclear as to the exact reason for this change in attitude, but this phenomenon contributes to theory development.
on the conceptual relationships between migration and the status of nursing in India where nurses have traditionally been marginalized.

4.3. Challenges to nurse migration

A thorough synthesis of the transitional obstacles faced by nurses from India was needed to present a complete picture of the reality of the migration experience faced by many nurses. Nurses should have the most accurate and recent information possible to make informed decisions as to both the positive and negative aspects of migration. The challenges associated with migration add a new dimension for consideration, and build upon the traditional push and pull factors that were previously prevalent in the nurse migration literature. International recruiters often highlight the pull factors associated with nurse migration; yet, some recruiters were cited in the literature as having deceitful practices (O’Brien and Ackroyd, 2012). These disreputable practices can lead to nurses making the decision to migrate based on false claims and sometimes lead to unsafe work practices such as mandatory overtime, or no paid leave (Percot, 2006). It is imperative for the migrating nurse to be aware of and watchful for these unscrupulous recruitment agencies, and for healthcare facilities hosting internationally educated nurses to avoid accepting recruits from such agencies. In addition, a lack of adequate assimilation programs has led to misperceptions of incompetence for the migrating nurses, and has been associated with Indian nurses being assigned a lower level of duties; which in turn has reinforced perceived inequalities among the nurses (Reddy, 2008; Sherman and Eggenberger, 2008; Xiao et al., 2014). These problems can also intensify the cultural differences noted in the literature and exacerbate the feelings of racism experienced by the nurses.

4.4. Decision making factors

While decisions to migrate can be aligned with the push factors described in the literature on nurse migration theory, it is important to note them in context with studies on retention and attrition of nurses in healthcare facilities within India. Bhattacharyya et al. (2011) reported substantial growth in healthcare infrastructure in India, expanding the nursing need in four tribal areas of rural India between 1981 and 2012, with a 64% increase in health sub-centers, 84% more primary health centers, and a 95% rise in community health centers. Unfortunately, these areas also face a critical nurse shortage and recruitment efforts have not produced sufficient quantities of nurses to fulfill the population needs (Bhattacharyya et al., 2011). Basic living amenities, higher salaries, continuing education opportunities, technology, and better educational facilities for children are needed to retain nurses in these regions of India (BiswaKarma, 2012; Ramani et al., 2013; Rao et al., 2013; Sundaraman and Gupta, 2011). These are the very pull factors prevalent in nurse migration theory, and should be the focus of strategies for programs to retain nurses in India.

4.5. Limitations of the review

Although the researchers had access to a robust electronic library, the study was somewhat limited by the search strategy utilized and the inclusion of English only texts. While a hand search of Indian journals was conducted, the researchers note the full scope of literature was not captured, including Indian dissertations that were not accessible through the search strategies explained.

5. Recommendations for research, practice, and policy

5.1. Gaps in the literature

All studies synthesized for this literature review were qualitative or descriptive quantitative studies rated with a high or good quality rating. A lack of interventional studies exists on Indian nurse migration and retention programs. Obviously, social and human factors may limit the use of these kinds of study designs. Intervenional studies are needed to test programs to increase nurse retention and decrease nurse attrition at healthcare facilities within India and to test their effects on migration from and within India. Until recently, mandatory bonds were enforced by healthcare facilities that supported a nurse’s educational tuition in exchange for a contractual agreement in which the nurse would repay the facility through a designated period of work. This provided nurses who could not afford tuition with means for their education and aided, temporarily, in nurse retention (Reddy, 2008). However, bond enforcements, in some cases, involved withholding the nurse’s license when a contractual agreement with a healthcare facility could not be upheld (Kochuthresiamma, 2012; Prescott and Nitcher, 2014). The abuse of these bonds by healthcare facility administrators became a human rights issue, and the Indian Nursing Council issued a statement that bond enforcements were no longer supported by the organization. Any facility that instituted unfair associated practices could lose their accreditation with the Council (Indian Nursing Council, 2012). In a resolution, the Indian Nursing Council stated:

Unethical practice of taking Service Bonds from students and forcefully retaining their Original Certificates should be stopped immediately. And also recommended that any such unethical practice of obtaining Service Bonds/forcibly retaining the original certificates of students comes to the notice of the Indian Nursing Council, and then in that event the Council would be forced to take a penal action against such erring nursing educational institution (p. 12).

The progressive changes in these traditional policies compound the need for more research on retention programs for nurses in India. Interventional studies are needed to assess these retention programs. Additionally, interventional studies are needed to assess the effectiveness of orientation and transition programs for nurses who migrate from India for both migrating nurses and nurses in host facilities to address the perceptions of profound cultural differences and racism found in the literature.

5.2. Nursing practice and health policy implications

This literature review raises several concerns that are directly applicable to nursing practice and health policy. First, the development of effective transition programs is needed to ensure the smooth transition for nurses into a new scope of practice or differing practice expectations, and to facilitate cultural competence of host facilities and nurses in order to reduce experiences of racism. Differences in scope of nursing practice including the use of autonomous decision-making, between home and host countries, can directly affect patient care and safety outcomes. The transition programs should include cultural training for both the internationally educated nurses and the host nurses to prevent perceptions and experiences of discrimination, unfair practices, and to promote cultural competency. In addition, these transition programs are an essential component needed to safeguard the financial investment of utilizing internationally educated nurses. According to Thokdi et al. (2011) the cost of recruiting, hiring and training an internationally educated nurse in the US ranges from $92,000 to $145,000.

Health policy reform is also needed to protect Indian nurses from growing reports of unscrupulous recruitment policies. The International Council of Nurses (2007) published a position statement that condemns unethical recruitment tactics, however stricter regulation standards are needed in India to prevent the exploitation of nurses planning to migrate from India. Khadria (2007) predicted the growth in nurse recruitment efforts from India and compared the practice to a profitable, organized “business process outsourcing” model (p. 1429). Tighter regulation of recruiting and staffing agencies both within India, and by firms based in host countries is needed. While some countries maintain regulatory bodies and licensing agencies for this purpose (Government of the District of Columbia Department of Health, 2014), healthcare facilities using agencies to recruit nurses should also consistently monitor for unethical practices. Alonso-Garbayo and Maben (2009) found both host facility nursing supervisors and migrating nurses noticed unethical practices by recruiting agencies. These practices included withholding pertinent information such as length of shifts and misrepresentation of the receiving employment agencies. Increased training of receiving health care facility human resources personnel to screen for these practices could prove beneficial in the recognition of unscrupulous practices.

Programs to increase nurse retention and decrease attrition are widely needed within India. The International Council of Nurses (2008) recommendations for positive practice environments for nurses should be used to build and strengthen nurse retention programs for nurses. These recommendations address elements including occupational health, safe workloads, organizational and peer support, professional development, autonomy, job security, fair remuneration, recognition programs, and access to needed equipment and supplies. While these programs require an allocated budget, the International Council of Nurses (2008) emphasizes the high cost of an unsafe or unhealthy work environment. Shifting expenses used to recruit, replace and train new nurses within facilities with high attrition to programs to increase retention can be used as a sustainable strategy for nurse retention.

6. Conclusion

This article synthesized the body of descriptive and empirical research on nurse migration from India, including nursing recruitment from and retention within India. Four key themes were identified to expand on push and pull factors previously discussed in the nursing literature that contribute to nurse migration from India. Key themes for this review included: exponential growth in nurse migration, decision making factors, challenges during and upon migration, and a shift toward the positive transformation of the status of nursing in India. Needs for future research include interventional studies to develop and test the effectiveness of nurse retention programs in India, as well as transition programs for nurses who have migrated from India. A focus on health policy and practice is needed to protect nurses from unethical recruiting practices, and to support nurse retention programs within India. As India’s health care infrastructure continues to expand and progress, nurse advocacy and health policy to strengthen the nursing workforce in India should be placed in its forefront. The increased globalization of nurses is beginning to reshape the perception of nursing in India as a respected career and profession and better positions nurses to organize and advocate for these changes.

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