CROSS-CULTURAL MANAGEMENT JOURNAL

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Article

The underlying causes for the shortage of nurses and how to rectify it: a comparison between Canada and Israel

Milana-Mazal MAZOR [1] (Israel)

Abstract: The shortage of registered nurses (RNs) is a challenging situation in many developed and developing countries, and this phenomenon is expected to exacerbate in the coming years, given the rise in life expectancy at birth. Many scholars emphasize the importance of RNs in achieving quality care, preventing complications, and achieving desired medical and health outcomes. Therefore, the shortage of nurses has a direct impact on the health of the population. This study conducts a comparison between the shortage of nurses in Canada and Israel. The study found many similarities in the causes of this shortage, yet there are differences in the assignment of nurses as well as in the recruitment of foreign nurses from abroad. Further, the number of new graduates who joined the health system in Israel and Canada in recent years was constant and stable. Looking at the trends in the employment of nurses in recent years, we learn about an increase in the number of nurses employed and a flat line over the years in the ratio of nurses per thousand inhabitants in both Israel and Canada. Additional reasons for the shortage of RNs lie in the slight increase in the number of students graduating from nursing schools in both Israel and Canada. Finally, both countries need to develop the training of RNs as a result of the increasing medical complexity of the patients, which requires professional nursing intervention in hospitalization and in the community. The article also discusses the issue of increasing the supply of nurses through retention and migration policies.

Keywords: **s**hortage of nurses; Health Canada; Israeli Ministry of Health; migration of nurses; retention of nurses; job dissatisfaction; burnout;

Citation: Mazor, M. -M. (2023). The underlying causes for the shortage of nurses and how to rectify it: a comparison between Canada and Israel**.** *Cross-Cultural Management Journal, XXV,* Issue (2/2023), 93-104.

Received: 03 August 2023
Revised: 04 November 2023
Published: 05 November 2023

[1] Faculty of Economics and Business Administration, Alexandru Ioan Cuza University
The country of origin of each author is specified in parentheses

INTRODUCTION

Due to a serious nursing shortage and an imbalance between the demand for and supply of nurses, the practice of examining the nurse shortage in OECD countries has dominated the agenda of the health system in these countries. The planning of career training and the understanding of the structure of the nursing workforce are all made possible thanks to worldwide surveys that scrutinize the supply of nurses. However, no thorough survey has been carried out that otherwise could help with planning the work characteristics, employment distribution by nursing fields, economic sectors, rates and reasons for leaving the workplace, and life expectancy of full- or part-time job of a nurse. All of these factors could enable conducting a comparison between the findings about the workforce and the human resources, illuminate the potential future required workforce, and could support the formulation of nursing personnel policy decisions. This study seeks to conduct a comparison between Israel and Canada on the shortage of supply of nurses, where the study's main goals are as follows:

- Examine the traits of the labor force and the characteristics of employment in both countries.
- Expound the patterns in professional mobility.
- Scrutinize the views regarding the nursing profession and the workplace.
- Use survey data on anticipated employment departures and examine the estimated supply of RNs.
- Analyze information from various sources on potential sources of additional manpower.

There are three related factors that contribute to nursing shortages in OECD nations, in general, and in Israel and Canada, in particular: first, an insufficient national supply of nurses; second, a lack of nursing posts; and third, unfavorable working conditions that squander nursing resources. The good news is that these reasons for the scarcity of nurses can be rectified. In addition, a lack of freshly qualified nurses and an aging nursing workforce are two additional structural factors that contribute to the shortage of nurses (Kwok et al., 2016). The current shortfall is caused by these structural issues. According to several studies, reductions in student nursing commissions over the past ten years have significantly exacerbated the nursing shortage in countries like Canada and Israel (Boamah et al., 2021; Aiken & McHugh, 2014). Given that it takes student nurses 3-4 years to complete their education and enter the workforce, this had a significant impact on the domestic supply. Additionally, it is impossible to comprehend the nursing workforce in isolation from other connected fields, such as social care, which rely on the same pool of nurses workforce to meet their own labor demands. This will increase the demand for nurses across the board for a profession that already faces significant hurdles in providing adequate care.

In Israel and Canada, and similar to many OECD countries, the number of nurses registered per clinical field and professional status is listed in the Israeli Ministry of Health and Health Canada's databases, respectively. Additionally, a report detailing the estimated number of employed nurses by geographical region in Israel and Canada is published by the Israeli Central Bureau of Statistics (CBS), and Statistics Canada, respectively.

Finally, planning for the future of the health workforce is directly tied to societal developments and health policy. It is necessary to investigate demographic changes, discrepancies in population groups' health status, aspects of the health system, and the nature of the profession. With the rise of life expectancy at birth in almost all OECD countries, "geriatric hospital system" has grown significantly and the treatment of patients in it mostly requires nursing care (Murphy et al., 2012; Ministry-of-Health-Israel, 2020). In the general inpatient context, the average length of stay in hospitals has decreased and many medical procedures are being performed in the community (as a result of advancements in science and technology). The percentage of older patients who are more challenging and complex is increasing, which is a result of advancements in medicine and technology. These adjustments have an impact on the size and appropriate professional mix of the nurse labor supply in hospitals. It also alludes to adjustments made to the community to which functions have shifted. In treating adult patients with chronic diseases, where the presence and training of the nurse play a critical role in reducing health deterioration and emphasizing preventive medicine and health promotion, many treatments call for nursing training in order to function properly and independently. All of these factors raise the demand for nurses and exacerbate the shortage of this workforce.

LITERATURE REVIEW

Numerous studies note the aging nurse population and identify this as a key factor in both nursing shortages and the propensity of many OECD nations to hire nurses from overseas. Other scholars identify occupational stress and consequently burnout as factors that subtly affects the availability of nurses as workers (Haik et al., 2017; Chachula et al., 2015).

Long hours, exhaustion, and comparatively low compensation are some workplace pressures that stimulate the early retirement of nurses. These elements have an impact on staff retention rates and contribute to excessive turnover (Murphy et al., 2012).

Further, nurses who have not received post-basic training are more likely leaving the profession than those who received such a training. First, such training raise the salary of a nurse and gives her the opportunity to specialize in a specific area of her interest.

The World Health Organization (WHO) research states that there are 18 million unfilled positions in the global health systems. The lack of supplies hinders the social and economic development of many nations and keeps up the demand for health care. The major conclusion of the 2018 UN Millennium Development Programs is that there is a lack of competent and skilled staff in the health sector, which results in inability to meet demand for health services.

According to the WHO and the World Bank, any nation's ability to withstand economic and social upheaval is directly impacted by its health system's human capital. They suggest that there has to be a paradigm shift so that human capital is no longer seen as an input but rather as an economic lever that generates health services that have a direct impact on economic growth. Among other things, worker productivity, inequality reduction, social cohesiveness growth, political stability, and technical innovation are important elements influencing economic growth.

Furthermore, reevaluating training, credentials, and working practices is necessary for a successful response to the worldwide trends that health systems are currently confronting. This is in addition to rearranging duties and responsibilities, extending professional boundaries, putting new technology into use, fostering teamwork, integrating, and generally fostering an organizational culture that places the worker at the center. A strong health care system depends in great part on the appropriate balance between the amount, composition, and professional competency of the team (OECD-Indicators, 2015).

Due to both the population's faster aging and the rise in overall per capita income, Israel's demand for medical care has risen by around 2% annually over the past ten years. Such a significant growth in demand necessitates the availability of qualified workers. With an emphasis on doctors and nurses, several groups have been drafting suggestions to minimize future shortages of people in the health professions. The demand and supply of manpower as a foundation for policy implementation, for broadening the scope of training, and to develop incentives for retaining qualified personnel in the public health system, were the main topics of reports published by the committees for strengthening the public health system and the issue of manpower in the health professions in 2015.

Other factors contributing to the high turnover rate of nurses include nurses' desire for greater freedom and a higher income, which lead many nurses to downsize to part-time work or leave the public sector altogether (Chachula et al., 2015). High nurse turnover is sometimes attributed to increased living and housing costs as well as the fact that nurses with families generally prefer to live in smaller towns rather than big cities.

RNs' wages and working conditions in Canada serve as trustworthy predictors of long-term trends including the increase in the number of aged and foreign RNs in the labor force. By controlling the criteria that current RNs take into account when determining whether to join nursing workforce and how many hours they are willing to work, nurses can alter the short-term supply of RNs. The long-run supply of RNs, however, represents the number of RNs that could potentially be supplied in the future given that nursing education lasts for three to four years. Therefore, while an increase in the long-term supply of RNs would not solve the current shortage, it could prevent such a shortage from occurring in the future.

The population of students choosing to study nursing, their propensity to do so, the cost of earning a nursing certificate, the appeal of other professions, the pay of nurses, and the ability of nursing education colleges to take on more nursing students are some of the main factors that affect the long-term supply of RNs. Since many competent applicants who applied to study nursing were turned away due to a lack of faculty, classroom space, and clinical space during the past few years, significant attention has been paid to the capacity of these academic institutions (Boamah et al., 2021).

There are also non-economic factors that affect the turnover and retention rates, such as the nature of the profession, the workplace, the expectations placed on RNs by their families, marital status and age, etc. Many RNs, especially married ones, are encouraged to cut back on their working hours or even leave the workforce and pursue early retirement as a result of a rise in household income and overall economic security.

Furthermore, the number of personnel assigned to each hospital ward is referred to as staffing. Since public hospitals make up the majority of hospitals in both Israel and Canada, the Israeli Ministry of

Health and Health Canda are responsible for deciding how many employees will work in each hospital; however, the allocation of roles may be significantly impacted by budgetary restrictions. In this sense, the shortage of nurses becomes a relative terms that stands in reference to the assignment of staffing in hospitals.

Given the undersupply of nurses in public hospitals, though, many nurses report that they are neither satisfactory of their working conditions nor promotion exists in hospitals, where the shortage of nurses results in a task that is distributed among a smaller number of nursing personnel. To encourage more interest in studying nursing, these limitations on the availability of staff posts, work conditions, and promotion should be addressed (Toren et al., 2012; Ganz & Toren, 2014). By the same token, research on both Canada and Israel reveal that one cause of inadequate medical care was insufficient staffing allocation, highlighting the necessity of increasing nurse recruitment, especially of high-caliber nurses (Ganz & Toren, 2014; Ariste et al., 2019). Additionally, hospitals had to post staffing lists for each ward that includes the number of nurses required to achieve minimal safe staffing standards.

ELEMENTS INFLUENCING THE SUPPLY SIDE OF NURSES

One source claims that Canada experienced a nurse shortage in the 1990s as a result of reduced funding for nursing students, which had a significant negative impact on the number of students engaged in nursing education (Duffield & O'Brien-Pallas, 2002; Halperin & Mashiach-Eizenberg, 2014). The government announced a shift in funding policy in 2015, announcing the removal of the enrollment cap and the provision of loans to nursing students in place of subsidies. In a similar vein, the Ministry of Health in Israel offers a standing loan at a low interest rate. In a certificate program for the degree of a registered nurse that started in 2019 in Israel, scholarships were provided as a standing loan on behalf of the Israeli Ministry of Health at the level of 50% of the tuition fees for the entire program, with the overall tuition for the program being around 23,000 NIS or around $7,000 (Ministry-of-Health-Israel, 2019).

According to other separate studies on nursing students on Israel and Canada, the new strategy of raising the number of nursing students and offering loans that must be paid after students begin working was intended to enhance the supply of nursing students (Zanchetta et al., 2013).

To a certain extent though, the competition for medical and nursing applications is a zero-sum game, where one student is accepted means that another student was rejected. In order to alleviate the nursing shortage, medical and nursing schools should work together to alter this situation. The availability of respectable positions, adequate, fulfilling working circumstances, and promotion should also be considered while trying to increase the number of nursing students.

While Canada has around 10 nurses per 1000 inhabitants (see Figure 1), Israel has only 5 and in order to reach the target of 6.2 nurses for every 1,000 persons in 2026, it is necessary for Israel to raise the number of nursing students enrolled in generic nursing training programs to a minimum of 4,000 in order to achieve this rate. Especially in the southern region, steps should be taken to raise the nursing student quotas by 300 candidates and to establish a second nursing department.

In 2009, there were 8.4 nurses for every 1000 people in the OECD countries. With 14 to 15 nurses per 1000 people, some Nordic countries have the highest nurse to population ratios. Although the numbers for Belgium only include nurses with a license to practice, which leads to an overestimation, the number is likewise high in Switzerland. Chile has the fewest nurses per person among OECD nations. Major emerging economies like India, Brazil, Indonesia, and China had fewer than 1.5 nurses per 1000 people in 2009, which was below the OECD average. However, Brazil and China have seen significant increases in the number of nurses in recent years.

In the majority of OECD nations over the previous ten years, the per-capita nursing workforce increased at an average pace of 1.8% per year, from 2000 to 2009. Among the OECD nations, Chile experienced the biggest growth, with a 12% annual increase, despite the fact that the country's per-capita nurse population is still quite low. Portugal and Korea saw a rapid rise in the per-capita number of nurses. Between 2000 and 2009, there was a decrease in the per-capita number of nurses in Israel. The Slovak Republic had a fall as well, despite the possibility that it would rise in the ensuing years due to the recent rise in the number of new nursing graduates. Between 2000 and 2007, there were fewer nurses per person in Australia and the Netherlands than there are now.

Further, Israel has a low ratio of nurses to doctor, while in Canada the ratio is high relative to many OECD. The ratio or nurses to doctor in Israel and Canada stands at 1.3 and 4.4, in 2009 respectively, and the ratio dropped in Canada to 3.9 and rose in Israel to 1.4 in 2015 (OECD-Indicators, 2011;

OECD-Indicators, 2015). It should be mentioned however that the ratio of physicians to 1000 population is 3.4 in Israel and 2.4 in Canada. While some of the tasks performed by doctors and nurses are similar, nurses have taken on some of the doctor's former obligations in both countries. Therefore, a low nurse-to-doctor ratio does not necessarily suggest that doctors can perform nursing activities, and increasing the number of nursing students admitted may make the nurse shortage less acute.

In the majority of OECD nations, nurses outweigh doctors as the most common health profession. Not only in conventional settings like hospitals and long-term care facilities, but also more and more in primary care (particularly in giving care to the chronically sick) and home care settings, nurses play a crucial role in providing healthcare. However, there are issues with nurse shortages in many nations, and these issues may get worse in the future as demand for nurses rises and the "baby boom" generation ages, triggering a wave of retirements among nurses. Due to these worries, steps have been taken in many nations to improve nursing education while also attempting to promote nurse retention.

Five nurses for every doctor in Ireland in 2009, compared to less than one nurse for every doctor in Chile, Greece, and Turkey. Italy, Mexico, Israel, Portugal, and Spain all have very few nurses per doctor. The average number of nurses per doctor among OECD nations is just under three, with most nations reporting between two and four nurses per doctor. Evidence suggests that there are too many doctors and not enough nurses in Greece and Italy, which leads to an inefficient use of resources. Some nations have created more advanced positions for nurses in response to doctor shortages and to guarantee appropriate access to care. A variety of patients, including those with minor illnesses and those needing routine follow-up, can benefit from improved access to services and shorter wait times when provided with care from advanced practice nurses, according to evaluations of nurse practitioners from the United States, Canada, and the United Kingdom. The majority of analyses reveal excellent patient satisfaction rates, with either cost-reducing or cost-neutral effects on costs. To remove any obstacles to extending their scope of practice, new advanced nursing professions may require modifications to legislation and regulations.

Older nursing workforce

In certain OECD countries, the proportion of nurses above 50 years old is about one third of the total (Lartey et al., 2014). This indicates, firstly, that while they are qualified and experienced, new hires cannot perfectly replace these experienced nurses. Second, practically all of these nurses will retire in the next ten years; some may even decide to retire earlier. In other words, the retirement of senior nurses and the influx of young ones may increase strain on the current staff because the latter cannot sufficiently handle the tasks that the former handles (Gabriel, 2011). In order to both close the gap and make up for their knowledge and experience, it is also possible that more nurses may retire from the field than nurses who will enter it. This problem led to a rise in the demand for foreign nurses in both Canada and Israel. Yet, while Canada is ready and willing to absorb migrating nurses from any country in the world, Israel is willing to admit Jewish nurses only. Based on Israel's Law of Return, only Jews can immigrate to Israel (Nirel et al., 2015; Ea et al., 2010).

Table 1 shows the percentage of foreign nurses of the overall nurses in Canada and Israel. Yet, given that Canada's population size is fourfold that of Israel (38 million vs. 9.5 million, respectively), the sizes of the domestically trained and foreign trained nurses of Canada are 7.67- and 6.1-fold that of Israel's. This means that proportionally speaking, Canada has 1.5-fold domestically and foreign trained nurses per capita more than Israel's.

Israel managed to increase the number of graduated nurses. 2,514 Israeli nurses successfully passed the Certified Nurse Licensing Exams in 2018, up from 1,981 in 2016. This is a 21 percent increase. In addition, 3,815 students started their nursing studies in 2018, up 1,328 from 2016 or a 35 percent increase over the same period. To further address the integration of newly immigrated nurses in the healthcare system, the Israeli Ministry of Health arranges round tables with members of and immigrant organizations. By expanding the number of students in the general tracks for nursing training, the Ministry of Health increased supply by announcing the start of nursing training programs. In 2019, 4,100 nurses joined the nursing workforce. There are 27 academic programs in Israel for a nursing bachelor's degree. According to the Israeli Ministry of Health, there are six specific programs for training undergraduates with a bachelor's degree in another subject to study nursing.

Israel is one of many nations throughout the world that must address the "human capital crisis" in the healthcare system. The availability, accessibility, quality, and efficiency of the nursing staff members are all aspects of the crisis. Many OECD nations are dealing with global issues at the same time as this crisis, including the aging population, an increase in chronic morbidity, a rise in the demand for

healthcare services in developed nations, a speeding up of the development of medical technologies, immigration of medical personnel, and a trend to reduce inequality in healthcare access and services.
Future developments in nursing education include a clear need to update the cognitive, communication, psychomotor skill range, social and management character of the nursing graduate in the twenty-first century due to the dynamic changes in the clinical, organizational, and technology environments in healthcare. For the US Institute of Medicine IOM's training programs and the American College of Nursing Organization have established six main objectives for ameliorating the job of nurses that include (American-Association-of-Colleges-of-Nursing, 1998) :

1. Liberal Education for Baccalaureate Generalist Nursing Practice, or the reinforcement of humanities-related topics in graduate programs, for nurses.
2. Direct patient care through Information Management and Patient Care Technology.
3. Understanding of the healthcare industry's political, legal, and financial environments is essential for nurses in their work.
4. Interprofessional Communication and Collaboration for Improving Patient-Health Outcomes is a term used to describe cooperation and teamwork among members of different professions.
5. Changes to training programs and teaching techniques are necessary to prepare graduates with these skills, including: Latitude reform implementation and Clinical judgment: The ability to assess data and information in an intelligent, research-based manner. Finding and using pertinent research data in clinical practice is known as evidence-based practice.
6. With the patient's view at the forefront, identify care that is culturally adapted and is based on the patient's requirements and preferences.

The National Institute of Medicine in the United States's (IOM) committee's findings were released in 2011 by the IOM. The committee recommended organizing nurses, removing all organizational barriers and burdens on nurses, empowering nurses through professional development and academic studies, and enabling nurses to fully utilize their professional skills and knowledge. This would help nurses realize their full professional potential. The committee acknowledges that the stress of their excessive workload and the lack of effective teamwork hinder nurses from reaching their full potential. These recommendations should be also considered in both Canada as well as Israel.

Forecasts for supply indicate that a decline in the number of certified nurses in the workforce is anticipated, from an estimated 28,500 in the year 2008 to about 21,201 in the year 2028, a reduction of 25% at the end of this time frame. Additionally, in 2028, there will be a decrease in the number of nurses employed per thousand people, from around 4 RNs to approximately 2 certified nurses (Ministry-of-Health-Israel, 2019).

Retention

The length of time spent working as a RN is related to the likelihood of leaving the profession after a certain number of years of employment. The study discovered that each of the following variables influences the choice to leave the profession by Israeli nurses, such as younger (24–34) age group compared to older age groups, choosing between employment in the public and private sectors, marital status that contrasts between being single against being married with young children (under the age of 18).
Likewise, the leaving rate from the workforce in Canada is around two percent per year for 35–50-year-old nurses to over 12% for RNs over the age of 60 (Angel Wang & Mikki, 2023). The impact on the RN shortage by lowering this leaving rate to 2% for both age groups can have a significant impact in narrowing the shortage and improving the quality of services to patients. In Canada such a reduction could lower the shortage to around 30,000 from 60,000. Data gathered from 2005-2008 assesses the exit rate of Canadian RNs below the age of 30 in the range between 12-14 percent (Chachula et al., 2015). The ability to retain nurses who are currently employed reduces the need for recruiting replacements. In this regard, the system's policy to increase retention is an important factor in preserving the supply-demand balance in the nursing profession.
By the same token, various researchers that wished to estimate turnover found that 10 and 12 percent of Canadian and Israeli nurses, respectively, are expected to leave their employment in 2030, which is similar to earlier findings on this phenomenon (Nirel et al., 2010). Overall, 28% on average of OECD nurses stated that burnout was the primary factor in their choice to quit the field, where stress and burnout are substantially connected with the desire to leave. Another source discovered that Canadian nurses blame their performance on their workplace circumstances (Jennifer Splane & Ruth, 2023; Houssem Eddine & Ivy Lynn, 2023). High nurse vacancy rates have a negative impact on the working conditions and staff morale, which contributes to the high turnover. When employees

can no longer handle the stress and workload, they express their wish to quit.

According to one Canadian survey, nurses between the ages of 60 and 64 and 35 to 39 are the most likely to quit. According to the Canadian Nurses Association, between 14-16 percent of Canadian nurses will leave the profession or retire over the next 5 years (Smiley et al., 2023). Additionally, turnover rates may differ by geography, with married women and families preferring to move from large urban areas with exorbitant housing costs to smaller communities with more space for less money. In contrast, large cities may also have a high rate of new nurse recruitment among young or single nurses. As a result, large cities may have a high rate of turnover, which does not indicate a shortage but rather a range of leaving and joining rates for various causes. There are therefore a number of policy interventions and options to solve the current shortage of nurses, given the variables affecting the supply and demand for nurses. These options include:

• Increase the number of nursing students enrolled.
• Increase the retention of the current nursing personnel.
• Persuade nurses who have quit to go back to work.
• To increase nurses' productivity and improve their working circumstances.

The optimum policy measures required to balance the supply and demand for nurses can be found by examining each of these measures in my research. According to a different study, factors in OECD countries that have an impact on nurses' desires to leave the profession include patients' aging populations, an increase in the number of critically sick patients, and an increase in workload that is not matched by higher pay (OECD-Indicators, 2015).

Numerous studies confirm that increasing retention and consequently reducing turnover would be more effective than any other option, including hiring foreign nurses, who might be content with lower earnings than native nurses from OECD nations (Brook et al., 2019; Moseley et al., 2008). However, it should be highlighted that there is growing rivalry for the pool of nursing workers, which drives up nurse compensation. The goal is to increase retention and decrease turnover. It is crucial to note, however, that for most nurses, the decision to leave is driven by factors such as marital status, age of the nurse and financial considerations. Married nurses with kids would choose to relocate to the countryside where they can purchase a larger home in small towns, as was already indicated.

One topic that will be looked at in this study is how to raise the retention rates of Israeli and Canadian nurses and what policy changes hospitals may make to realize this goal. It should be mentioned as well that hospitals with budget deficits cannot compete with institutions with stronger financial foundations. Given that it takes several years to expand the pool of locally trained nurses, governments and hospitals are left with a limited number of options, including improving retention rates, luring returnees, reducing turnover rates, and/or hiring foreign nurses (Ben-Nathan et al, 2011), given that the demand is rising as a result of the aging population and the spread of chronic diseases.

In Britain, for instance, it was stated that from 1999 to 2004, almost 19,000 nurses who had taken early retirement returned to work (Marangozov et al., 2016). This indicates that there is a sizable pool of retired nurses who could be persuaded to come back, and the governments of OECD countries can tap into this pool.

Hospitals and governments must, nevertheless, comprehend the factors that lead to nursing professionals desire to quit the field in order to increase the rate of retention, prevent turnover, and increase the number of returnees. The average age of nurses is undoubtedly one of the major contributing factors. Among those who are 50 years of age and older, the desire to retire, personal family obligations like caring for sick parents or children, and workplace issues like a stressful environment and limited promotion opportunities are main reasons provided for leaving the nursing profession. The study's findings support the opinions of stakeholders in the healthcare system regarding the working conditions of nurses in Israel, enabling more precise forecasts of the supply of nurses and decisions about the breadth of training and personnel recruiting.

Further study on the need for qualified nurses and the balance between supply and demand may be based on these findings as well. By doing this, they may also help with the long-term strategic planning process for this workforce.

Due to a severe nursing shortage and an imbalance between demand and supply, it has been more common in the West to examine and forecast the supply side of the nursing workforce in recent years (Rotem-Picker & Toren, 2004). In Israel, there was disagreement over whether Israel was actually approaching such a shortage; nonetheless, it appears that there is now general agreement that such a scarcity exists. The European Union undertakes a large-scale survey of nurses to learn more about the amount of early retirement from the profession, the causes of it, and the job characteristics connected to it, which results in a shortage of nurses in these nations. This serves as a foundation for understanding how to keep workers in the field,

prevent them from quitting, and decide on labor-related policy matters. This study, which involved a sample of certified nurses from around the country, was done with the aim of presenting comprehensive data on the availability of RNs and their work characteristics. As a result, the study plans the breadth of basic and post-generic training while also allowing for the necessary expansion of nurses.

The phenomenon of nurse migration

The growing needs for skilled professional personnel, and the fact that nursing training programs do not meet the demand in developed policies, have increased the shortage of nurses, increased the competition for the limited professional personnel workforce, and stimulated processes of importing skilled personnel, from developing as well as other developed countries (Kingma, 2018). As a result of the manpower crisis, nurses are currently moving as an international global workforce, not only from developing countries to developed countries, but also from some developed countries to other developed countries, as well as between developing countries in the same geographic region (Brady et al., 2021).

The research literature indicates that the migration process of nurses is multi-causal and it is not limited to one issue, such as wage (Valizadeh et al., 2016; Ortiga, 2018). Other factors drive the migration of nurses, such as an aspiration to improve one's quality of life, professional growth and development, professional advancement, improving opportunities for learning, lack of support from superiors, overload in the level of care provided, lack of autonomy in the position, a high level of attrition and mobility, poor working conditions, job dissatisfaction, social/economic, personal and family reasons, a sense of personal insecurity (including AIDS risks and health risks) and a poor public image of the nursing profession (Little, 2007).

The United States and Canada are major recipients of migrating nurses that pursue aggressive processes of recruiting nurses from abroad, with the aim of meeting their growing needs for nursing personnel. The processes of encouraging the immigration of nurses to these countries intensified starting in the mid-1980s, by a variety of means, including private agencies. Aiken and Cheung predicted in 2008 that the demand for nurses in the United States in 2020 will stand at 2.8 million nurses, yet given the low supply of 1.8 million, the shortage of nurses will stand at more than one million, more than any other profession (Aiken & Cheung, 2008). This means that the US is competing against other OECD over migrating nurses. There is a growing demand for professional, foreign nurses to fill vacant positions in general hospitals and in institutions for long-term care. The phenomenon of migration of nurses from OECD countries, such as Israel and Turkey, is a source of concern for these countries, although according to the data of the International Health Organization, in comparison to the developed countries, Israel is not considered a major "exporter" of nurses. Despite this, the immigration of nurses from Israel is a growing phenomenon in the last two decades. The immigration of nurses from Israel is part of a broad process of "brain drain". Canada is also a similar challenge of nurses migrating to the US (Hall et al., 2009). The findings indicate that economic and professional incentives, as well as political, social and cultural factors, were good predictors of immigration. Likewise, data on brain drain from Israel show that people with an academic education had a stronger tendency to immigrate from Israel than those with a lower education (Handel & Kagan, 2010). It was also found by one study that among the immigrants from the former Soviet Union to Israel, many young people with an academic education immigrated to the West. According to data from the Nursing Administration at the Ministry of Health (Ministry-of-Health-Israel, 2007), between 2002-2007, 5905 new certified nurses joined the nursing workforce. During that period, 1526 qualified nurses applied to receive permits and documents for the purpose of immigrating abroad. This number constitutes 26% of the new workforce that joined the health system in those years, although it is assumed that some of the applicants were older nurses (Rotem-Picker & Toren, 2004).

All in all, high turnover of nursing workers has become a worrying phenomenon in recent years. The negative consequences affect nurses, health organizations and the public. A nurse's intention of leaving a unit is often the first step in a chain reaction, after which the nurse leaves the hospital and eventually the profession. Nurses who remain in the system carry an increased workload because of the changing staff and a low ratio of nurses to patients in a ward. This pressure can worsen the situation and lead to a further increase in the intention to leave, which leads to a vicious circle. Healthcare organizations are currently forced to invest resources at a high level in recruiting, screening and integrating new nurses into the workforce. The result may harm the quality of patient care due to less experienced and less satisfied staff members.

Finally, employee satisfaction is her/his emotional response to work and refers to the question of whether an employee likes the work and the

environment at the workplace. The organization's policy, salary, relations between employees and management style may be reasons that affect dissatisfaction and departure from the profession. Satisfaction of the nursing staff was found to be a predictive factor for both patient satisfaction the patients and less accidents. The job satisfaction of nurses is one of several factors that influence the intention to leave their workplace. Intentions to leave are negative reactions to the job and the work environment, which may cause actual leaving in extreme cases. One study found that stress and dissatisfaction of the nursing staff are main factors related to leaving the workplace (Heinen et al., 2013). Leaving is influenced by the personal characteristics of the employees, the organizational climate and work pressures that the employees experience directly in their work. The working conditions of the employees and their motivation may affect satisfaction their desire for work and their intentions to leave the workplace. Burnout is a state of fatigue and frustration that occurs because of a commitment to a goal, or a relationship that did not realize the expected reward. Such a state arises from a feeling of helplessness and hopelessness, in an emotional way and a negative attitude towards work, life and towards other people. Burnout is characterized by a continuous response to emotional and interpersonal pressures related to work, and is characterized by mental, emotional and physical exhaustion, which leads to the development of a negative sense of helplessness. Burnout is affected by work overload, control, reward, commitment, justice, fairness and values. Lack of transparency between employees to the organization increases the chance of burnout. The result can be low satisfaction and low commitment of employees to the organization, which ultimately leads to a high rate of departure. Positive relationships were found between the intention to leave a workplace and burnout.

CONCLUSIONS

This study examines the shortage of nurses in both Canada and Israel that results from a high level of fatigue, job dissatisfaction, and relatively low salary. The study also found other factors that may affect the desire to leave the profession, such as age, marital status etc. In the Israel case described above, the inadequacy and balance between the effort invested in work and the salary as a reward was a strong factor predicting the intention to leave the profession. Dissatisfaction was one of several variables that were associated with intentions to leave. The study concludes that these factors can be addressed, and the problem of nurses' shortage can be rectified by increasing the rate of retention and rate of return of nurses that left the profession in recent years.

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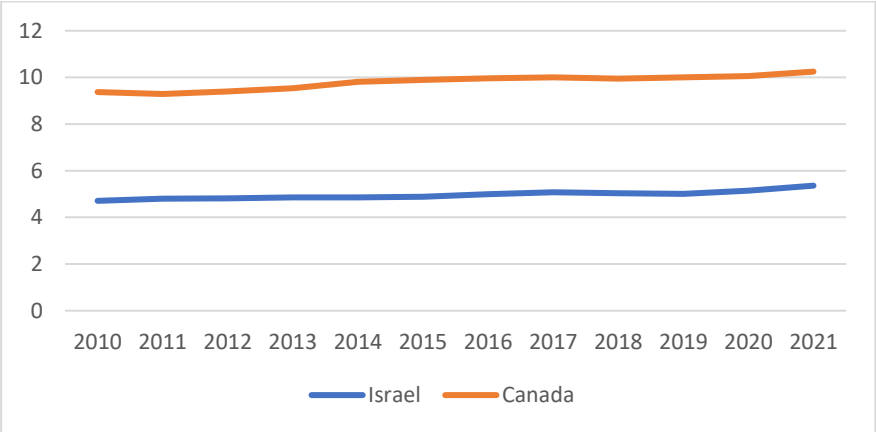

Figure 1
Nurses, total per 1000 inhabitants
Source: OECD Health Statistics 2023,
https://stats.oecd.org/Index.aspx?DataSetCode=HEALTH_REAC

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Table 1
Overall foreign and domestically trained nurses in Canada and Israel

Year	Canada			Israel		
	Overall Foreign Trained Nurses	Overal Domestically Trained Nurses	Percentage of Foreign Trained Nurses	Overall Foreign Trained Nurses	Overal Domestically Trained Nurses	Percentage of Foreign Trained Nurses
2010	25635	327399	7.22	4782	41670	10
2011	26000	332665	7.21	4686	42116	9.74
2012	25341	337225	6.94	4645	42657	9.57
2013	28348	346399	7.54	4541	43216	9.29
2014	29525	353328	7.69	4538	44250	9.12
2015	30189	358472	7.73	4536	45122	8.98
2016	31362	362921	7.91	4631	46168	8.99
2017	32347	364571	8.11	4892	47453	9.23
2018	33517	366155	8.32	5126	48730	9.42
2019	34695	369906	8.48	5533	50290	9.82
2020	36094	378649	8.61	6285	52119	10.68
2021	37795	386384	8.81	6549	54396	10.68
Average	**30904**	**357006**	**7.88**	**5062**	**46516**	**9.6**

Source: OECD Health Statistics 2023, https://stats.oecd.org/Index.aspx?DataSetCode=HEALTH_REAC