Abstract

Aim: To examine the level of job satisfaction of Nurse Practitioners/ Advanced Practice Nurses in developing and developed countries.

Background: The Nurse Practitioner/Advanced Practice Nurse has the advanced, complex skills and experience to play an important role in providing equitable healthcare across all nations.

Introduction: Key factors that contribute to health disparities include lack of access to global health human resources, the right skill mix of healthcare providers, and the satisfaction and retention of quality workers.

Methods: The study utilized a descriptive analysis and cross-sectional survey methodology with quantitative and qualitative sections of 1419 job satisfaction survey respondents.

Results: Age, number of hours worked in a week, and length of time that Nurse Practitioners/Advanced Practice Nurses worked in their current jobs were statistically significant in job satisfaction. A key barrier was the lack of respect from supervisors and physicians.

Discussion: It was clear from the number of comments in the qualitative section of the survey that having a wide scope of practice is rewarding and challenging to the Nurse Practitioner and Advanced Practice Nurse.

Conclusion and Implications for Health Policy: The challenges to transform healthcare gaps of access into a better distribution of health care in all countries would constitute a systematic change in policy including providing education and training for doctors and nurses that will match the skills needed in the workplace; emphasizing the right skill mix for the health care team; supporting advanced practice nurses in the workplace and utilizing all health care providers to the fullest extent of their abilities.
Keywords: advanced practice nurse, barriers to job satisfaction, developed and developing countries, facilitators of job satisfaction, healthcare, mixed method design, nurse practitioner

**Background**

The United Nations’ Sustainable Development Goals (WHO, 2016) are to ensure equitable improvement on health across all nations. Progress in achieving those goals has been hampered by such factors as a lack of experienced and educated health workers. The World Health Organization (WHO, 2014, p. 30) reported that skills-mix imbalances persist, with insufficient utilization of advanced practitioners, midwives, nurses and auxiliaries, and that a wide variation in availability and accessibility persists within countries because of attraction and retention difficulties.

The Organization for Economic Co-operation and Development (OECD) established in 1961, is made up of 35 countries including the United States and Canada, whose mission it is to promote policies that will improve the economic and social well-being of people around the world (OECD, 2016). According to the OECD, the growing demand for and supply of health workers has increased over time in all OECD countries, with jobs in the health and social sector accounting in 2014 for more than 10% of total employment in most of those countries (2016, p. 1). However, a lack of proper coordination in health workforce planning, education and training policies to assess in a more comprehensive way the future requirements of different categories of health workers was identified (Lafortune, 2016).

The concepts of making a difference, influencing health policy, creating 21st century leaders and leading change have all been themes related to the advance practice nurse role discussed by Nurse Practitioners/Advanced Practice Nurses (NPs/APNs) at past International Council of Nursing (ICN) conference presentations (Stanik-Hutt, J., 2012; Stilwell, B., 2012; MacPhee, M., 2014; Salmela, S., 2014) within the ICN Nurse Practitioner/Advanced Practice Nursing Network (ICN NP/APNN).
The question of whether NPs/APNs have satisfaction in their jobs is a natural progression of these themes. Little is known or published as to whether the role is satisfying to NPs/APNs on an international level. This study was created from those discussions. This study, undertaken by the Practice Sub Group, part of the ICN Nurse Practitioner/Advanced Practice Nursing Network, provides quantitative and qualitative data in relation to job satisfaction in developed and developing countries.

**Literature Review**

Job satisfaction is a concept that has been extensively examined throughout nursing literature. The nursing profession has helped to define factors that influence job satisfaction and dissatisfaction. Although the elements and interpretation of factors has evolved over time, the basic elements remain relatively consistent relating to the need to understand variables that motivate NP/APNs. As the advanced nursing role has developed internationally, research in job satisfaction in developed countries has emerged but little is known as to whether NP/APNs’ satisfaction and dissatisfaction is similar in all countries or between developed and developing nations. A search of the literature for studies involving comparison of NP/APN job satisfaction in developing countries found no results. Shea (2015) used grounded theory to describe that NPs held holistic care as the foundation of their work. In this study NPs reporting becoming dissatisfied when patient care was compromised, a belief that is present in some element throughout the majority of studies.

Goolsby (2011) surveyed over 19,000 nurse practitioners in the U.S. about such variables as education, practice patterns, compensation, and job satisfaction, and found that over 66.8% of APNs were very satisfied with their jobs.

Supporting the data from the US, Lamarche and Tullai-McGuinness (2009) using the Herzberg lens and the Misener Nurse Practitioner Job Satisfaction Scale found that elements that had the most influence on overall job satisfaction of Canadian NPs were the extrinsic category of partnership/collegiality (factor 1) and the intrinsic category of challenge/autonomy (factor 2).
Factor 1 included such variables as: respect for your opinion, consideration of your opinion, and factor 2 included autonomy, challenge in work, and sense of accomplishment.

In Europe, the published literature specific to job satisfaction is emerging. An Irish national mixed methods evaluation of the NP/APN roles conducted by Begley et al. (2010) provides some evidence. A total of 105 interviews were conducted as part of the study. Policy makers (n=12) expressed gratification about NP/APNs’ organization skills and their focus on providing continuity of care, which were perceived to leading to improved care and treatment compliance. Additional time during consultations was spent on developing therapeutic relationships and on patient education, which was viewed as a rewarding aspect of NP/APN work and paramount for achieving patient-centered outcomes.

Methodology

This study utilized both descriptive statistics and cross-sectional design via an online survey of NP/APNs examining job satisfaction of developed and developing countries. For the purpose of this research study and survey, the International Council of Nurses (ICN) definition of a Nurse Practitioner/Advanced Practice Nurse which is “a registered nurse, who has acquired the expert knowledge base, complex decision making skills and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or the country which she/he is credentialed to practice” (2009, p. 1) was used.

Theoretical Framework

Herzberg’s seminal motivation-hygiene theory (1974) was used as the theoretical framework for this study. According to Herzberg, what makes people satisfied at work are factors that relate to the content of their jobs, such as achievement, recognition for achievement, interesting work, increased responsibility, growth, and advancement. These areas are considered intrinsic factors. The factors that make people unhappy at work are extrinsic factors, such as company policy and administration practices, supervision, interpersonal relationships, working conditions, salary, status, and security. The satisfiers are motivators and correlate with creating positive attitudes of job satisfaction. According to Herzberg’s theory, it is the overall satisfaction that
Determines whether workers will remain in their jobs. The factors that most influence job satisfaction are those that are largely under the control of employers and policy-makers - salary, benefits and working conditions (Herzberg, 1974).

**Research Questions**

The aim of the study was to examine and compare the level of job satisfaction between NP/APNs in developing countries to those practicing in developed countries and to gain insight from the participants in terms of facilitators and barriers. Specific research questions used to guide the study included:

- What is the overall level of job satisfaction for NP/APNs internationally?
- Are facilitators and barriers to practice different for NPs/APNs in developing countries versus developed countries?

**Data Analysis**

Analyses were conducted using the Statistical Package for the Social Sciences (SPSS) version 23.0 and STATA 14 software. Qualitative data was thematically analyzed manually. Continuous data and categorical data were summarized using descriptive frequencies and percentages. The Intrinsic and Extrinsic factors were determined using factor analysis. The variables ‘vacation/leave policy’ and ‘retirement plan’ strongly correlated and were labeled extrinsic factors. The variables ‘sense of accomplishment’, ‘consideration given to your opinion’, ‘level of autonomy’, 'sense of value’, ‘challenge in work’ and ‘respect for your opinion’ strongly correlated with each other and were labeled intrinsic factors. These variables also correlated with Herzberg’s theory (Herzberg, 1974) of factors for satisfaction and dissatisfaction.

Linear regression analysis using STATA 14 and SPSS software was performed comparing the extrinsic variables and intrinsic variables with the independent variables age, gender, length of time the respondent had worked for his/her current employer, and number of hours a week he/she practiced as an NP/APN. A level of p < .05 was set for statistical significance. Means testing was done of the intrinsic and extrinsic variables and were converted into
satisfaction/dissatisfaction responses, using the following breakdown in scores: VD - Very dissatisfied 1.0 - 1.5; D - Dissatisfied 1.6 - 2.5; MD - Minimally dissatisfied 2.6 - 3.5; MS - Minimally satisfied 3.6 - 4.5; S - Satisfied 4.6 - 5.5; VS - Very satisfied 5.6 - 6.

Data Collection

The survey was launched online using the Qualtrics survey tool (a cloud-based survey tool). The language was English only, and the potential recipient was sent an anonymous link individualized to one person only. Once the survey was accessed, the person could not re-enter it or send it to someone else. Each completed survey was checked for a unique response set of number and letter combinations. The survey was distributed over three months in 2015 targeting NPs/APNs in 53 countries. NPs/APNs in 19 countries responded.

Sampling

Purposive sampling occurred through invitations to participate in the study sent to ICN question, asking whether the person was interested in filling out the Demographic section.

The questionnaire captured such items as: gender, age, education level, hours worked, length of time the role had been in the country, what country did they practice, number of years they had practiced, what field of practice, net income, type of environment they work in, age groups they worked with, type of funding, and whether they worked for a union. The responses were categorized by numbers, no names or identifying personal data was collected.

The second part was the Misener Nurse Practitioner Job Satisfaction Scale (MNPJSS), consisting of 29 questions. The Misener Nurse Practitioner Job Satisfaction Scale (MNPJSS) was developed as a “reliable and valid instrument to measure job satisfaction among nurse practitioners” (Misener & Cox, 2001, p. 91). It has since been used both nationally and internationally. The items represent six factors: (a) intrapractice partnership/collegiality; (b) challenge/autonomy: (c) professional, social, and community interaction; (d) professional growth; (e) time; and (f) benefits.
Both the demographic and MNPJSS sections were reviewed by the ICN and the NP/APNN core steering group for content and international language and terms, removing redundancy and adding explanations of terms used. Therefore, a modified MNPJSS survey was designed and agreed upon for this study. A text comment section was added at the end of the survey for comments. Each item was rated on a seven-point Likert scale, with 1 = very dissatisfied to 6 = very satisfied, and 7 = N/A (not applicable). A high overall mean score indicated job satisfaction. Permission for the original survey was granted from the steward of the tool developed by Dr. Misener, deceased, to use this tool on the condition that Dr. Misener’s name was mentioned (Warner, J. 2014 email correspondence from Joanne Warner, PhD, RN, Dean, School of Nursing, University of Portland. warner@up.edu).

**Ethical Considerations**

Ethical approval was obtained from four University ethics panels in addition to consent to perform the study from the ICN and NP/APNN Network Core Steering Group - Indiana University Kokomo Institutional Review Board, Study # 15-05-01X; University of Huddersfield School Research Ethics Panel SREP/2014/051; DCU Research Ethics Committee DCUREC/2014/243; and Athabasca University Research Ethics Board (AUREB) 21799. The informed consent and study information sent to the contacts for the ICN member nursing associations included the following: identification of the researchers from the practice subgroup of the ICN NP/APNN, the purpose of the study, the ICN definition of an NP/APN and Institutional Review Board (IRB) approvals. The information also included a sentence regarding the survey data that would be initially collected and stored with password protection on a server in the U.S., and would be subject to access under the U.S. Patriot Act until it was transferred from that server to the researcher’s’ computer.

**Results**

A total of 1680 surveys were completed of which 1419 or 84% met the inclusion criteria. Results were analyzed quantitatively and qualitatively.

*Demographics*
Nineteen countries were represented in the data. The majority of respondents came from the United States. NPs/APNs (5) who identified their country were working in dual countries in as USA/Germany, USA/Mexico and Puerto Rico (a territory of the US). At least nine countries responded with ten people or more. Six of the respondents’ surveys came from developing countries. They were Botswana (1), Nepal (1), and South Africa (4).

Most respondents were female (87.5%), more than 60% were between the ages of 41 and 60 years old, and most had practiced as an NP/APN less than six years (41.8%). More respondents had worked for the same employer for 1-5 years (38.6%) than other time frames, and most worked an average of 40 or more hours a week as an NP/APN. The majority of NPs/APNs were funded by the government or third-party insurance.

Almost half (48.9%) of the NPs/APNs worked in a clinic/office-based environment, although there were many other types of practice environments in which NPs/APNs listed such as: long-term care, revalidation with short stay, emergency/ambulance service, mental health, college health, urgent care, hospice, HIV/AIDS, military, neurology, and instruction and education of nurses, doctors & students.

Of the age groups the respondent cared for (Neonates/infants, Pediatrics, Adults, Women, Families, & Geriatrics), most (86.3%) worked with adults. Most (77.8%) NPs/APNs were educated at the masters’ level. The next largest proportion of NPs/APNs (18.4%) reported being educated at doctorate level.

*Job Satisfaction*

The authors found that results eighty-three percent of the countries’ responders were minimally to very satisfied with their job.

Linear regression results indicated (Table 1) that age was statistically significant in the intrinsic factors, and the length of time worked for the current employer was significant in the extrinsic factor. The number of hours worked in a week as an APN was significant with only the extrinsic factor.
Utilizing crosstab descriptive frequencies with SPSS software, the group aged 51-60 was more satisfied than other age groups in terms of the intrinsic factors. Those respondents who had the most job satisfaction were middle aged, and had not been in the job more than 5 years, which was similar to the results of age group satisfaction found by Kacel, Millar and Norris (2005).

Age was not statistically significant in the extrinsic factors vacation and retirement. However, NPs/APNs who worked for the same employer for 1-5 years and/or over 30 hours a week appeared to be the most satisfied with vacation and retirement benefits. (Table 2).

There was no statistically significant difference in job satisfaction between developed countries and developing countries, the type of practice the NP/APN works in, the amount of pay, or the type of environment the respondent worked in.

Means testing of each country resulted in overall satisfaction of the intrinsic variables and extrinsic variables (Table 3). There were differences in “consideration given to your opinion and suggestions for change” and “sense of value for what you do”, as the developed countries showed dissatisfaction in these intrinsic variables where the developing countries were not dissatisfied. Both developed and developing countries showed dissatisfaction of “level of autonomy” and “respect for your opinion”. Both developed and developing countries showed dissatisfaction of the extrinsic variables of “vacation/leave policy” and “retirement benefits”.

Qualitative Findings

A number of key themes correlated with Herzberg’s motivation-hygiene profiles (Herzberg, 1974). Herzberg (1974, p18) stated in his benchmark publication that “the satisfier factors are known as motivators because if they are present in appropriate amounts in any organization, they bring about work motivation as a corollary to their creating positive attitudes of job satisfaction.” The satisfaction or intrinsic factors of work, responsibility and growth were represented by the following respondents’ comments:

Work itself
“Most of the time, we discuss the care plans and medications with attending doctors. We have a lot interaction when work[ing] in a group. Social workers, PTs, and RTs are also engage with care [of the] patients”. (Taiwan)

**Responsibility**

“I work as a NP with full prescribing rights in scope of Older Adult care. My practice is autonomous and collaborative with MDT. I run clinics 4 days per week in 4 different residential hospitals (nursing homes) and 1 day per week have input into Clinical Governance for entire organization (the organization is not-for-profit Anglican and has over 700 residents in retirement villages and residential care). I trained and became endorsed as NP with full support of this organization.” (New Zealand)

**Growth**

“I have been given a chance to develop a new way of supporting and coaching the elderly for getting old and staying fit.” (Finland)

The dissatisfaction or extrinsic factors of company policy and administration, supervision, interpersonal relations, working conditions, and status were represented by the following respondents’ comments:

**Company policy and administration**

“We have no vacation policy, no retirement plan, and the physician for whom I work seldom, if ever, says anything positive about the work I do. Her total focus is on productivity - numbers of patients seen. I am "self-employed" by her choice so that she does not pay the US Government employment tax for me. This also means I can leave or take days off any time I wish. My satisfaction level is low, but tolerable knowing I could leave any time.” (USA)

**Supervision**
“I may have certain degree of freedom in my working area, but I feel the management is still not behind the idea of ANP. I may do what I want as long as it does not cost and I do not bother them.” (Switzerland)

*Interpersonal relations*

“Most specialist[s] outside my practice know me and know that I am the continuing factor on the ward. That is different when I want to [admit] a new patient in surgery room. [Then], the anesthetist will not speak to me because I’m not a doctor.” (The Netherlands)

*Working conditions*

“I struggle with getting even a semblance of respect from the physicians I interact with. Despite my level of knowledge and how I present myself (speaking, interaction with physicians, manner of professional dress, information I provide), I find that the vast majority of physicians in my area do not respect NPs.” (USA)

*Status*

“There is a lack of dual role positions - teaching with the university and maintaining family practice. There is a model for physicians for this in our Country/province but minimal movement in making this happen for NPs. There is also lack of support for obtaining Doctorate Degree - this needs to be done with the minimal vacation time we already have and off the side of our desks.” (The Netherlands)

*Discussion*

This study analyzed the factors that influence job satisfaction and job dissatisfaction from an NP/APN’s perspective. In some countries, the role is very young (Kruth, 2013), with continued regulatory issues, lack of respect for the NP/APN’s competency, resulting in underutilization of the role. The results of this study should be viewed with the lens of how health and illness are shaped by these competing forces. There are many countries in which the role of the advanced practice nurse is not recognized or formalized, such as in most countries of South America and
some areas of Africa, and yet nurses may be the only point of health care contact for the community.

It was clear from the anecdotal comments that having a wide scope of practice is rewarding and challenging to the NP/APN. Satisfaction of the role was enhanced due to the ability to respond with initiatives to improve the health care needs of the community. Autonomy and respect from colleagues enhanced job satisfaction.

In terms of length of time in position and its effect on satisfaction, the majority of the respondents had been in their positions no more than 1-5 years. Kacel, Millar and Norris (2005) found that NPs were most satisfied the first year of practice, with a steady job each succeeding year, and plateauing between the 8th and 11th years. The older NP/APNs had more job satisfaction than those in other age groups with respect to the intrinsic and extrinsic factors. One might tentatively conclude that this age group may have been working previously as a nurse for many years, and the new position gave them cause for job satisfaction.

In terms of dissatisfiers resulting in workers leaving the job, Lassi, Cometto, Huicho & Bhutta (2013, p. 824) suggested that the inability to retain good health workers resulted in “the poor performance of health systems in delivering effective, evidence-based interventions and that it has been linked to the poor retention, inadequate performance and poor motivation of health workers.” Poor systems will create poor quality of care.

Some specific dissatisfiers were highlighted by respondents. A theme of increased administrative task emerged as with this exemplar from England: “Recent local changes to the Nurse Practitioner role have decreased patient contact and increased admin[istrative] and office work. This has caused my level of satisfaction to drop considerably”. Role limitations and lack of acceptance from other clinicians i.e. tests and referrals not being accepted by physicians and also lack of support from nursing colleagues who appear threatened by the role were identified. One participant noted that they accept “territorial sensitivities” and work around this.

**Study Limitations**
The ability to offer a true comparison of job satisfaction between NP/APNs in developed and developing countries was not possible due to the limited response rate from these countries. Further study with a larger sample size should be considered to further develop understanding of the intrinsic and extrinsic factors impacting job satisfaction of NP/APNs internationally.

Response bias was a consideration. A combined factor of use of only one language, computer technology and access to a computer could have influenced the response rate. There was difficulty finding NPs/APN email addresses from developing countries’ nursing associations. The MNPJSS was modified due to “fitting” the language for an international audience, therefore statistical analysis was limited. Caution was used to interpret the MNPJSS findings. In future work, areas such as identifying areas of underutilization of skills, safety in the job, and ethical dilemmas need to be explored more.

**Implications for Advanced Practice Nursing and Health policy**

The role of the Nurse Practitioner/Advanced Practice nurse exists in over 25 countries in the world (Kruth 2013), yet there is a lack of standardization in terms of title protection and regulation process (Kooienga & Carryer 2015; National Nursing Centers Consortium 2014; ICN NP/APN Network, 2014) among other issues.

The results of the survey indicate that more work needs to be done to develop the role of the advanced practice nurse in all countries, as well as retain current personnel. Regulation is still a presenting barrier for many, the definition of the role needs to be clarified, educational requirements should be standardized, and support from the healthcare community and political environment of each country must be solidified.

Challenges also remain in the area of faculty staffing of NP/APN programs in developing countries such as Botswana, as well as regulatory and policy framework. “Regulatory and policy framework guiding practice continues to be weak. Future research could further explore the correlation to job satisfaction and intent to stay in the job under current management and staffing practices” (Seito, O.S. personal communication 2016).
In terms of educational preparation, the majority was Master's-prepared NPs/APNs, and yet may be underutilized and undervalued as evidenced by the qualitative comments. The WHO (2014) recommended that countries assess the gap between the need for a health workforce, actual supply (stock, skills mix and competencies) and the population’s demand for health services. (Lafortune, 2016, p.1) observed that the main health workforce priorities in OECD countries have shifted from concerns of widespread shortages towards more specific issues related to ensuring the right mix of health workers and a proper geographic distribution to provide adequate access to health services to the whole population.

Buchan & Dal Poz (2002) gave examples of possible interventions utilizing different skill mixes as solutions for health care shortages, costs, and quality improvement, health sector programs and reform, technological innovations, and changes in the legislative/regulatory environment.

Greater standardization of educational requirements, regulation of the role, fair and supportive working conditions are critical to both the recruitment and retention of NPs/APNs. National Nursing Associations and ICN should continue to advocate for the development of, and support for, these crucial nursing roles. One of the 2014 Global APN Symposium (National Nursing Center Consortium 2014) five recommendations for standardization of the advanced practice nurse role included removing policy barriers that prevent APNs from practicing to the full extent of their education and training. These nursing roles are part of the solution to meeting growing health needs and demands and both nursing leaders and organizations should robustly make this case to political and policy leaders and ICN have a global leadership role to play.

In order for countries to work towards a better distribution of health care and the retention of the health care force, policy changes must occur, such as developing ways to retain the workforce by improving working conditions, redesigning initial education and training programs of all health care providers, and developing a team-based approach with healthcare workers with different skill levels. Job satisfaction is an integral part of a healthcare provider’s performance, retention and delivery of quality work. Further research with regards to the country-specific factors that influence NP/APN practice may assist in clarifying and redefining the role internationally.
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