Nurse Practitioner Role Implementation in Ontario Public Health Units

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ABSTRACT

Objective: To identify the barriers and facilitators associated with the implementation of the nurse practitioner (NP) role in Ontario’s public health units (PHUs), the NPs’ job satisfaction, and the relationship between NP job satisfaction and practice dimensions.

Methods: This descriptive study involved a postal survey of all NPs (N=29) working in Ontario PHUs.

Results: Twenty-eight (96.5%) NPs completed the survey. The facilitators to role implementation most often identified by the NPs were management support, the NPs’ knowledge of the PHU programs, and access to PHU programs for their clients. The barriers most often cited were being the only NP working in the PHU, inadequate salary, and lack of coverage when the NP was away. When working with community physicians, the most common facilitators were the trust shown by physicians when making shared decisions and physician respect for the NP. The most common barriers were the unwillingness of specialist physicians to accept referrals from the NP and physicians’ lack of understanding of the role. Overall, the NPs were satisfied with working in the PHU, satisfied with their collaborative relationship with physicians and minimally satisfied with their salaries.

Conclusion: NPs have recently been introduced in PHUs in Ontario. A number of factors have facilitated role integration. At the same time, a number of barriers to their role implementation have been identified and if addressed, can contribute to the optimal utilization of this role in PHUs.

Key words: Nurse practitioners; public health; primary health care; role implementation; job satisfaction

La traduction du résumé se trouve à la fin de l’article.

Quantitative Research

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NP ROLE IMPLEMENTATION IN PUBLIC HEALTH UNITS

Table 1. Age and Education of Respondents (N=28)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number of Respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td></td>
</tr>
<tr>
<td>25-35</td>
<td>2 (7.1)</td>
</tr>
<tr>
<td>36-45</td>
<td>18 (64.3)</td>
</tr>
<tr>
<td>46-55</td>
<td>7 (25.0)</td>
</tr>
<tr>
<td>56-65</td>
<td>1 (3.6)</td>
</tr>
<tr>
<td>Education*</td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td>7 (25.0)</td>
</tr>
<tr>
<td>BScN</td>
<td>17 (60.7)</td>
</tr>
<tr>
<td>Baccalaureate (other)</td>
<td>4 (14.3)</td>
</tr>
<tr>
<td>Primary Health Care NP cert</td>
<td>25 (89.3)</td>
</tr>
<tr>
<td>Master's in Nursing</td>
<td>4 (14.3)</td>
</tr>
<tr>
<td>Master's (other)</td>
<td>3 (10.7)</td>
</tr>
</tbody>
</table>

* % Total greater than 100% due to multiple responses

Subjects and setting
All NPs who held Registered Nurse in Extended Class [RN(EC)] certification, were employed by a PHU in Ontario, and maintained an active clinical practice were invited to participate in the study. These NPs were employed in contract, part-time or full-time capacities.

To locate eligible NPs, the investigator (ADG) spoke with clerical or nursing staff and/or managers in all 36 PHUs in Ontario. Through these telephone inquiries, it was determined that 29 NPs were employed. Snowball sampling did not identify any other NPs working in Ontario PHUs.

Data collection
The survey was developed by adapting a questionnaire used in a study to identify barriers and facilitators associated with the implementation of the NP role in all primary health care settings in Ontario. Additional items were developed based on the results of studies conducted on NPs in Ontario PHUs and the literature review.

The questionnaire was designed to collect data about the NPs’ demographic characteristics, funding source, practice patterns, professional support, relationship with physicians, practice setting and model as well as barriers and facilitators to their role implementation. NPs were asked to indicate on six-point Likert scales (1 = very dissatisfied; 6 = very satisfied) their global satisfaction with their roles in the PHU, their salaries and their working relationship with collaborating physicians.

Four NPs who did not meet the inclusion criteria were invited to pretest the questionnaire for clarity and length. Based on their feedback, minor revisions were made to the questionnaire. Two weeks later, three NPs completed the questionnaire again, providing similar answers both times.

In January 2007, the questionnaire was mailed to the 29 NPs working in Ontario’s PHUs. Included with the mailed questionnaire package were: a personalized cover letter that described the study, a stamped return envelope, a $2.00 coffee shop gift certificate and a ballot to participate in a draw for one of five subscriptions to a health-related journal of choice. Follow-up was conducted with non-respondents two to three weeks after the initial mail-out. The investigator (ADG) telephoned them to ensure that they received the survey package and to address any questions or concerns about the survey.

Analysis
Descriptive statistics included frequencies, means and standard deviations. Associations between NP practice dimensions such as time spent in clinical activities and job satisfaction were analyzed. Because the sample size was small, the data were mostly continu-
the PHU, inadequate salary, and poor employer awareness of the NP role (Table 3). Similarly, in written responses, the NPs identified these themes as negative aspects of their roles. The theme of professional isolation arose because the NPs reported being the sole NP in the PHU (7/28, 25%), working on their own (1/28, 3.6%), and not being part of a team (7/28, 27%).

The most frequently identified barriers specific to the relationship between the NPs and community physicians were: the unwillingness of specialists to accept referrals from the NP (53.5%), physician lack of understanding of the NP role (42.8%) and the personality and philosophy of the physicians (35.7%). Barriers ranked most highly specific to this relationship were: the unwillingness of specialists to accept referrals from the NPs (53.5%) and the lack of respect shown by the physicians (46.4%). Respondents commented positively on the support from the clinic or consulting physician (3/28, 10.7%) and negatively about the lack of understanding of their role by other health care providers (4/28, 14.2%).

The three facilitators that most NPs identified were: the support received from their managers, NPs' knowledge of PHU programs, and access to PHU programs for their clients (Table 4). The three received from their managers, NPs' knowledge of PHU programs, and the public health philosophy (Table 3). Similarly, in written responses, the NPs identified these themes as positive aspects of their roles. The theme of professionalism and philosophy of the physicians (35.7%) was identified as a barrier by 35.7% and as a facilitator by 46.4%; and the personality and philosophy of the physician was identified as a barrier by 35.7% and as a facilitator by 46.4%. Respondents who were in favour of union membership liked the benefits of job security (9/15, 60%), better working conditions (4/15, 27%), salaries and benefits (4/15, 27%) and having a pay grid (1/15, 6%). Respondents averse to union membership cited issues related to being under-represented (4/9, 44%), not having NP needs addressed by unions (1/9, 11%), lack of flexibility with salary and benefit negotiation (1/9, 11%) and a pay grid that did not reflect their years of experience (1/9, 11%).

About half the NPs felt they were able to practice to their full scope of practice (53.6%). Those NPs who did not feel that they practiced to their full scope identified restrictions often related to the parameters of their program, which were influenced by Mandatory Health Program Service Guidelines (MHPSG) and the funding that the PHU program received from the provincial government. The MHPSG set out the minimum requirements for public health programs and services targeted at disease prevention, health promotion and health protection. The Ontario Public Health Standards, 2008 (OPHS) have replaced the MHPSG.

**Satisfaction with workplace, collaborating physician and salaries**

Using a six-point Likert scale, the mean job satisfaction score was 4.5 (median and mode = 5.0). These findings indicate that the NPs were “satisfied” in their workplace. As well, 35.7% reported that they intended to work five years or more in their PHU. NPs were generally “satisfied” with their collaborative relationship with the physician (mean, median and mode = 5) and minimally satisfied with their salaries (mean = 4, median and mode = 5).

**Relationship between NP practice dimensions and NP job satisfaction**

There was a positive correlation between the work satisfaction of the NPs and their satisfaction with their collaborative relationship.
with the physician ($r = 0.59, p<0.01$) and their salaries ($r = 0.59$, $p<0.01$), and an inverse relationship between their work satisfaction and the number of orientation events they attended ($r = -0.34$, $p<0.01$) and the number of barriers present in their relationships with the community physicians ($r = -0.46, p<0.05$). There was an inverse relationship between NP job satisfaction and the proportion of time spent in clinical activities ($r = -0.399, p<0.05$). There were no statistically significant relationships between NP job satisfaction, years they intended to work in the PHU ($r = -0.25$), number of practice locations they worked at ($r = 0.26$) or number of PHU staff to whom they were accountable ($r = 0.13$).

**DISCUSSION**

Most of the barriers and facilitators identified were consistent with the findings of the survey of NP-PHCs in Ontario,10 a recent survey of NP-PHCs in Ontario,5 qualitative program evaluations of NPs in PHUs,6,7 and a scoping literature review on collaboration between primary care and public health.15

A surprising finding was the inverse relationship between NP job satisfaction and the amount of time they spent providing clinical care. This is in direct contrast to the findings of an earlier Ontario survey.10 This inverse relationship may exist for several reasons. It is possible that some PHU NPs feel overwhelmed by the clinical demands of their role given their solitary work environment and isolation from other PHU staff. As well, the PHU employer may perceive the PHU NP role to be more of a physician replacement, especially in under-serviced areas or in PHU sexual health clinics.

A lack of time to focus on the other dimensions of the APN (Advanced Practice Nursing) role including education, research, leadership and professional development may also explain this finding.16 APNs value the non-clinical aspects of their role and these activities contribute to their role satisfaction.17,18 Although the PHU NPs valued their clinical practice, as evidenced by the high priority they placed on providing care to vulnerable populations, their qualitative responses also reflected their appreciation for the health promotion and disease prevention aspects of their role. These components were assigned the top priority as positive aspects of their role and were identified as being an advantage to situating the NP role in the PHUs.

While a strength of this study is its high response rate, telephoning each PHU to speak with the clerk or manager may have inadvertently missed potential respondents because these PHU staff may not have been aware of whether an NP was working in another PHU program. The small sample size, albeit representing most of the population, may have lacked the power to detect significant relationships.

This study used global measures to assess the satisfaction of the NPs with their roles, their salaries and their working relationship with collaborating physicians. Such measures are highly subjective and may be influenced by the events that are occurring at the time that the respondent completes the survey.

**Implications**

This study identifies the barriers and facilitators specific to NP role implementation in Ontario PHUs and factors associated with NP job satisfaction. This information can be used to improve role integration in these settings. Further PHU-based investigations should explore the impact of unions, the NPs’ collaborative-consultative relationships with physicians, the negative correlation between NP job satisfaction and clinical practice, and perceptions of managers and physicians about the NP role in this setting. Given that PHUs are having difficulties recruiting and retaining NPs, interviews with those who leave these positions may be informative.

Previous studies on the experiences of PHUs that employed NPs have shown that NPs have effectively reached their target populations5-7,10 and integrated into public health services.5-7,10 Yet, the funding for their positions has been unstable.5,6,10 The emergence of NP roles in Ontario PHUs heralds an era of innovative nursing initiatives and service delivery for the clients of PHUs. These NPs need to be supported and the facilitators and barriers to their full integration addressed in order to successfully implement their roles.

**REFERENCES**


RÉSUMÉ

Objectifs : Définir les éléments qui entravent et ceux qui favorisent l’implantation du rôle des infirmières praticiennes (IP) dans les bureaux de santé publique de l’Ontario, la satisfaction professionnelle des IP et le lien entre la satisfaction professionnelle et divers aspects de l’exercice de la profession.


Résultats : Vingt-huit IP (96,5 %) ont répondu au sondage. Les éléments le plus souvent cités comme favorisant l’implantation du rôle des IP étaient l’appui de la direction, la connaissance des programmes du bureau de santé publique par les IP et l’accès à ces programmes pour leurs clients. Les obstacles les plus souvent cités étaient le fait d’être la seule IP à travailler dans le bureau, le salaire insuffisant et l’absence de remplaçants pour les IP. Quand les IP travaillent avec des médecins communautaires, les éléments les plus souvent cités comme favorisant leur implantation étaient la confiance manifestée par le médecin dans la prise de décisions partagées et le respect du médecin envers l’IP. Les obstacles les plus courants étaient le refus des médecins spécialistes d’accepter les personnes dirigées par l’IP et le manque de compréhension du rôle des IP par les médecins. Globalement, les IP étaient satisfaits de leur travail dans les bureaux de santé publique, satisfaits de leur collaboration avec les médecins et marginalement satisfaits de leur salaire.

Conclusion : La présence des IP dans les bureaux de santé publique de l’Ontario est récente. Un certain nombre de facteurs ont facilité leur intégration. Simultanément, des obstacles à l’implantation de leur rôle ont été cernés; l’abolition de ces obstacles pourrait contribuer à optimiser l’utilisation des IP dans les bureaux de santé publique.

Mots clés : infirmiers praticiens; santé publique; soins de santé primaires; implantation du rôle; satisfaction professionnelle.

What Disturbs Our Blood
James FitzGerald

The FitzGeralds, father and son, are Canadian medical pioneers. In the 1920s, Gerald FitzGerald is a crucial player in the work of Banting and Best. Vaccines created by the Connaught Labs save untold lives, and Gerry’s groundbreaking work in public health makes his Canadian hometown the envy of a world struggling with infectious disease. Years later his son, Jack, a jack aficionado who chums with the likes of Duke Ellington and Count Basie, finally answers the family calling and becomes a renowned allergist. In time, however, both men are forgotten, abandoned to history along with the shame and darkness that ends their careers, a plaque of their own lineage.

Erudite, passionate and illuminating, What Disturbs Our Blood is a piece of the finest social history. A family memoir that lays to rest one family’s secrets, it also reminds us of a golden era in our history, when our brightest minds commanded the respect of not just Canadian peers, but of the world.