RESEARCH ARTICLE

A survey on the attitudinal differences between acute and community settings

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Introduction: While challenges facing community and acute care practitioners have been studied elsewhere, this is not the case for respiratory therapists (RTs). This study aimed to examine attitudinal differences amongst RTs in British Columbia regarding challenges faced by acute and community settings.

Methods: A 40-item anonymous online survey was sent to members of the British Columbia Society of Respiratory Therapists. Of the 40 questions, 11 were relevant to the study’s aim.

Results: Of 1024 invitations, 197 (19.2%) responded. One-hundred and seventeen (59.4%) self-identified as working in acute care settings, 53 (26.9%) in community settings, and 27 (13.7%) as “other”. Stress- and interpersonal-related challenges showed statistically significant differences (P ≤ 0.05) based on work setting. Acute care had the highest percentage of responses for challenges related to technology, stress, inter-professional collaboration, and training. Community settings had the highest percentage in challenges related to independence and education. Both being equal received the highest percentage in challenges related to problem-solving, interpersonal, communication, and resource management.

Discussion: While attitudinal differences exist, they are not extreme. It did not appear that respondents’ primary motivation was to vote along “party lines”.

Conclusions: The setting an RT works in can influence attitudes related to stress and interpersonal challenges. Despite this, one setting is not universally more challenging. Acute care settings can have greater technological, inter-professional, and training-related challenges. Community settings can have greater independence and education-related challenges. Both settings can provide similar challenges with problem-solving, communication, and resource management.

Key Words: respiratory therapy; community health services; critical care; attitude of health personnel; British Columbia; health care surveys

INTRODUCTION

There are increasing arguments that healthcare and the respiratory therapy profession need to move outside hospital walls [1–5]. These arguments are supported by complex issues such as increasing population age [6], the complexity of patients with one or more chronic diseases [7], and opportunities for role growth and value [8–12]. In Canada, as in other parts of the world, most respiratory therapists (RTs) work in hospitals that provide acute care compared to out-of-hospital, community-based settings [13–16]. It is difficult to know precisely how many, as national statistics only capture the total RT count [17]. Provincially, some regulatory colleges annually report on the number of RTs working in specific practice areas. In Ontario, 73.4% of RTs worked in acute or critical care settings, while 16.6% worked in community and complex continuing care settings [18]. In Saskatchewan, 63% worked in critical care, and 11% worked in community/rehab [19]. In Manitoba, 40.7% worked in acute care, 20.1% worked in mixed acute and chronic care, and 3.2% worked in chronic care [20]. These examples also show the difficulty of separating acute care and community settings cleanly. RTs work in various circumstances that vary in size, specialization, and support. An RT working in a rural area may have different responsibilities than one in an urban area. These differences can blur the lines between the two settings, as shown in Manitoba’s mixed acute and chronic care category [20]. For this research project, an RT community setting was defined through a public health lens. This implied that most of the time an RT spent practicing was outside hospital walls, and greater emphasis was placed on promoting respiratory health, preventing respiratory compromise and disease, providing respiratory health education, and managing chronic respiratory disease [21]. This can translate into roles more focused on areas such as medical equipment provision and management, chronic disease management and education, home oxygen provision and management, and caring for patients with chronic mechanical ventilation needs outside a hospital [22–25].

Most entry to practice curriculum for RTs is based on training for acute care settings [26]. Given that the majority of RTs work in acute care settings, there is justification for this emphasis. However, some RTs will choose to enter community settings immediately upon graduation. This presents challenges to educational programs training RTs to prepare graduates for both acute care and community settings. For example, it is unknown if an RT entering acute care settings requires the same knowledge, skill, and experience as one entering community settings. Similarly, it is unknown if the challenges an RT graduate entering community settings faces are more, less, or the same as one entering acute care.
Examining other healthcare professionals, such as Registered Nurses, provides insights into these gaps. For nurses, community settings are commonly more isolated, which can necessitate becoming more self-reliant and working in broader scopes [27]. Isolation can demand greater independence and reliance on professional accountability [27, 28]. In addition, a community setting can present different challenges to time management and organization [29]. For example, acute care settings can have more routine processes, while community settings can have more priority-based processes. Routine processes do not imply simpler processes, but can imply greater predictability.

In acute care, roles and responsibilities are likely to be more clearly defined. There is greater security in knowing a larger team can respond if difficulties arise [27]. Additionally, being outside a hospital influences power dynamics. In hospitals, providers have greater power, while in clients’ homes, the client has greater control over the provision of care [29]. With these differences a community setting can impose, there can be an unchallenged assumption that working in community settings should only be the domain of experienced practitioners [29]. Despite this assumption, both experienced and new graduates face challenges when transitioning into community settings [30].

While the challenges and differences facing community and acute care practitioners in other healthcare professions have been studied, this is not the case for RTs. To help address this gap, a survey was conducted to answer the question of what attitudinal differences exist amongst practicing RTs in British Columbia regarding challenges faced by acute and community settings. This survey was completed as one component of a master’s capstone project in 2018. This project utilized an action-research approach [31] in collaboration with the RT program at Thompson Rivers University (TRU). The overarching question was how the TRU RT program could foster improvements in RT graduates’ readiness to work in community settings. It was hypothesized that those self-identifying as working in acute care settings would be less likely to respond that community settings are more challenging, while those self-identifying as working in community settings would be less likely to respond that acute care settings are more challenging.

METHODS

The author designed a 40-item anonymous online survey since no standardized or validated questions from the literature were found. Approval to conduct the study was granted by Royal Roads University Research Ethics Board.

Survey development

Questions were created based on the expertise of the study group, which included respiratory therapists, a registered nurse, a physiotherapist, and a non-healthcare advisor. Of the 40 possible questions, all participants were asked to respond to 29, with the remaining 11 using branching logic based on a specific response. Of the 29 questions asked to all, one asked participants to self-identify the setting they currently work in (acute care setting, a community setting, or “other,” with the option to describe what they considered “other” to be). Ten of the 29 questions identified attitudinal differences between acute care and community settings. Participants selected responses from a fixed scale, ranging from acute care having significantly more challenges, acute care having slightly more challenges, both settings having an equal degree of challenge, the community setting having slightly more challenges, or the community setting having significantly more challenges. Only the 10 questions asking participants to compare settings, and the one question asking participants to self-identify are included in this report. The remaining questions are not included because while they did seek opinions and interests around community settings, they did not assist in answering the question of what attitudinal differences exist amongst practicing RTs in British Columbia regarding challenges faced by acute and community settings. No one within the study group completed the survey.

Participants

In collaboration with the British Columbia Society of Respiratory Therapists (BCSRT), an invitation was emailed to registered members. The study purpose, benefits, risks, confidentiality and real or perceived conflicts of interest were provided. Recruitment was conducted via email over 1 month (February–March, 2018). Two reminder emails were sent to all participants before the final closing date. No monetary or other incentives to participate were provided. The survey was conducted using the online survey platform Interceptum [32]. Active members receiving an invitation included registered RTs and non-registered RTs, such as students. To be a registered member, one had to meet the requirements of completing the national entry to practice examination and reside in British Columbia [33]. One thousand eighty-three invitations were sent out to registered members, with 59 kicked back due to incorrect email addresses, resulting in 1024 delivered. Based on how the member database was constructed at the time, it was not possible to exclude the small number of student members from receiving a survey invitation. Students that did receive an invitation were asked not to complete the survey. Given the online format, length of the questionnaire, and voluntary participation with no incentives for completion, an anticipated completion rate between 17.1% and 21.2% was anticipated [34].

Data analysis

Collected data were cleaned into Microsoft Excel and analyzed using JASP open-source software [35]. A comparative analysis between the acute care and community setting for each self-identified group (acute care, community, and other) was done using χ² tests. A P-value ≤ 0.05 was considered significant.

RESULTS

Of the 1024 invitations delivered, 197 (19.2%) participants responded. Of the 197 participants, 117 (59.4%) self-identified as working in acute care settings, 53 (26.9%) self-identified as working in community settings, and 27 (13.7%) self-identified as “other.” Those who identified as “other” varied in their reasoning, from working in diagnostic areas, educational programs, private sales, or working in a mix of acute and community settings. It was not possible to assign someone who responded as other to either the acute or community groups.

Data are provided in two formats. Table 1 presents survey responses in a collapsed format. This format presents a response for significantly more or slightly more as “has more.” So, a response of “acute care setting has significantly more challenges,” or an “acute care setting has slightly more challenges” is presented as “acute care setting has more,” and vice-versa for community settings. The second format is provided in Supplementary Material 1.1 This supplement provides a non-collapsed breakdown of each group’s response to each possible option.

As presented in Table 1, question three, focusing on stress, and question five, focusing on interpersonal challenges, were the only questions with a P-value ≤ 0.05 when comparing all three respondent groups. A P-value ≤ 0.05 indicates that when asked which setting may have greater stress and which may have greater interpersonal challenges, there is a high probability that the RT’s response will differ based on the work setting they self-identified. For example, in question three, 78.6% of acute care and 63.0% of other respondents believed acute care settings had greater stress challenges, while 47.2% of community respondents believed acute care settings had significantly more or slightly more, compared to 49.2% of community respondents. Alternatively, 18.0% of acute care respondents for the same question believed both settings had equal challenges, compared to 45.3% of community respondents and 29.6% of others. For question five, the number of respondents that believed each setting had equal degrees of challenge was 41.0% for acute care respondents, 52.8% for community respondents, and 33.3% for other. Comparatively, for the same question, 41.0% of acute care respondents believed acute care had more challenges, 30.2% of community respondents believed community settings had more challenges, while 40.7% of other respondents believed acute care had more challenges, and 26.0% believed community had more. Data from these questions supports the hypothesis that those identifying as working in acute care would be less likely to respond that community settings are more challenging, while those self-identifying as working in community settings would be less likely to respond that acute care settings are more challenging. The remaining eight questions did not have a P-value ≤ 0.05 and did not support the hypothesis.

When examining total responses, acute care settings having more challenges received the highest total percentage of responses in four out of the 10 questions. Two of these four questions had a majority of total responses, specifically, question one focusing on technology (58.4%) and question three focusing on stress (68.3%). The other two did have the highest total percentage but did not have an overall majority, specifically question seven focusing on inter-professional collaboration (40.6%) and question 10 focusing on training (39.1%). Community settings having more challenges received the highest total percentage of responses in two out of the 10 questions. Both settings having equal degrees of challenge received the highest total response rate in four of the 10 questions; these occurred in question two, focusing on problem-solving (38.1%); question five, focusing on interpersonal challenges (43.2%); question six, focusing on communication (44.2%); and question nine, focusing on resource management (38.0%). While equal challenges received the highest total response rate in these four questions, it was never an overall majority.

**DISCUSSION**

This study aimed to answer the question of what attitudinal differences exist amongst practicing RTs in British Columbia regarding challenges
faced by acute and community settings. A broad answer to this question is that there does appear to be attitudinal differences with stress-related and interpersonal-related challenges. However, a more nuanced answer would add that while there are differences, those differences may not be as extreme as one may be conditioned to think. For example, acute care settings may present more significant challenges in some areas, such as stress and technical challenges, while community settings may present more significant challenges in others, such as independence and education. Additionally, a recent study believed that both settings presented equal degrees of challenge in areas such as problem-solving, interpersonal stress, communication, and question resource management.

These findings share similarities when examining other healthcare professions’ viewpoints, especially those entering or soon to be entering the healthcare workforce. For example, when comparing nursing students’ perceptions of acute care and community settings, acute care is often seen as more exciting and challenging and offers more technologically advanced level of care [36, 37]. In contrast, community settings are seen as largely being made up of elderly patients with chronic illnesses, and offer greater opportunities to work independently [36–38]. Compared to results from this study, one could argue that registered RTs would agree with these nursing student perceptions: acute care settings are more exciting, if one were to equate stress with excitement, and have more technology-related challenges. In contrast, community settings present greater independence and demands with patient education, if one were to equate chronic disease with patients who likely require more education. A critical factor also seen with these nursing student perceptions is the negative connotations associated with community settings. Community settings were widely seen as boring, working with elderly patients was seen as depressing, and students perceived less opportunity for advancement [36–38]. Acute care settings, on the other hand, were seen as more important and exciting [36, 37].

These perceptions are due in part to misguided views on how complex and varied working with patients in their homes can be [36], how home care is provided by lower-skilled caregivers [38], and the degree of exposure to community settings during clinical placements [37]. This gives evidence that how one setting is presented can influence future graduates’ perceptions of a particular setting, which in turn influences their likelihood of seeking employment in them [36–38]. For example, a significant positive correlation was seen in one study between nursing student experience during clinical placement and their perceptions of nursing tasks. Student nurses who had a positive experience in community settings more positively perceived community nursing tasks [37]. Additionally, when surveyed, around 5% of nursing students desired to enter community settings [36, 38].

Before data collection, it was hypothesized that those self-identifying as working in acute care settings would be less likely to respond that community settings are more challenging, while those self-identifying as working in community settings would be less likely to respond that acute care settings are more challenging. This hypothesis is not supported except for questions related to stress and interpersonal challenges. There did not appear to be a trend that respondents’ primary motivation was to vote along “party lines”. Out of the 197 total respondents, 117 (59%) self-identified as working in acute settings. If each of the 117 respondents that acute care settings always had significantly or slightly more challenges, acute care settings would have had the majority of responses in every question. This did not happen. While there were questions where acute-care respondents saw acute settings as having more challenges and community respondents saw community settings as having more challenges, this was not the case for every question. Acute care and community respondents all had questions in which they found the other setting to have greater degrees of challenge. Those who self-identified as “other” showed weighting towards both settings depending on the question. When examining which options received the highest percentage of overall responses, both settings having equal degrees of challenge received the highest total percentage in four of the 10 questions. This is important because it offers a counterpoint to the perception that those working in one setting may see the other as always having it easier, or that one setting is universally more challenging.

Given the amount of time and emphasis the entry-to-practice curriculum focuses on acute care content [17] and the reality that most RTs work in acute care facilities [13–16], those in or entering the profession may be nurtured to believe that acute care is where they should work to apply themselves to the maximum potential. This could be a mistake. While settings can differ in some skills, tasks, and procedures, each has challenges and rewards. Both settings will demand the need to adapt to stressful situations, use specialty equipment, work independently, educate patients, train new learners, communicate, solve problems, and manage interpersonal and resource-based conflicts. One setting may have a greater degree of challenge in an area, and if those challenges sound interesting, RTs, both new and experienced, should be encouraged to follow through and see where it takes them.

Limitations
This study has many limitations. The response rate of 19.2% was low, although not an entirely unexpected result for an anonymous, self-enrolled online survey with no incentives. This small sample size restricts the broad inferences that can be made from the results. Additionally, results were taken from one province only and may not represent pan-Canadian views. Survey questions were not systematically validated, so variables such as participants’ work experience, age, amount of experience, and others may have influenced question interpretation. Lastly, there are risks in interpreting results by combining slight and significant responses, as respondents may interpret each scaler differently. For example, one may interpret slightly more challenge as a very small amount, while another may interpret it as a moderate amount. Supplementary Material 1 has been provided to allow for complete examination of all responses to offset this risk.

Implications for future research
There are many opportunities for future research regarding RTs and work settings, especially from a pan-Canadian perspective. This can include examining respiratory therapy students’ perceptions of acute care and community settings, examining what factors influence those perceptions, and examining expectations of what knowledge, skills, and experiences an RT should possess in a community versus an acute care setting. In addition, results were collected prior to the turbulence, stress, and strain the COVID-19 pandemic has placed on RTs in Canada. If these same questions were asked today, responses to some questions might differ. Lastly, there needs to be greater pan-Canadian detail beyond the provincial level on the number of RTs working in specific settings.

CONCLUSIONS
For registered members of the BCSRT, the setting an RT self-identifies as working in can influence attitudes when comparing acute care to community settings regarding stress and interpersonal-related challenges. Additionally, one setting being universally more challenging than the other was not found, and that perception should not be encouraged. Acute care settings can present greater challenges related to technology, inter-professional collaboration, and training. Community settings can present greater challenges related to independence and education. Both settings can present equal challenges related to problem-solving, communication and resource management.

DISCLOSURES
Acknowledgments
I would like to thank the BCSRT for allowing me to distribute surveys through their member database. I would also like the thank Mark Rakowchuk for assisting with the data analysis. M.M, T.D, B.M, K.M, E.C, S.R.

Funding
This study did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Competing interests
All authors have completed the ICMJE uniform disclosure form at www.icmje.org/coi_disclosure.pdf and declare: no financial
relationships with any organizations that might have an interest in the submitted work in the previous 3 years. Since completing this survey, the author has gained employment at TRU. During the study, the author was not employed by TRU. The author was also in a common-law relationship with a Respiratory Therapist who was contractually employed by TRU. This individual did not participate in the survey or data analysis. All records were password secured and encrypted.

Ethical approval
Informed consent was obtained from all participants. The REB (Royal Roads University) approved the study.

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