

High turnover in clinical dietetics: A qualitative analysis

Sarah J Hewko (✉ shewko@upei.ca)

University of Prince Edward Island Faculty of Science <https://orcid.org/0000-0002-8804-4686>

Amirah Oyesegun

University of Prince Edward Island Faculty of Science

Samantha Clow

University of Prince Edward Island Faculty of Science

Charlene VanLeeuwen

University of Prince Edward Island Faculty of Science

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Abstract

Background: Relationships between dietitians and other healthcare providers can impact the degree to which patient care is collaborative; inefficient communication can lead to suboptimal care. It takes time for multidisciplinary team members to build collaborative, trusting relationships. For this reason, frequent dietitian turnover (or “churn”) is of concern. Consequences include fewer referrals to clinical dietetic services and limited provider continuity. The characteristics of clinical dietetic jobs associated with churn have not been identified. The principal investigator’s professional experience and a review of the literature led us to predict that managers would identify disease prestige as having an impact on churn. In this article, we report the qualitative results of a multi-method study that we conducted to explore: 1) characteristics of clinical dietetic jobs in the public sector associated with the most churn, and 2) consequences of churn on patients and managers of clinical dietitians.

Methods: We conducted semi-structured interviews with ten managers of clinical dietitians in the Canadian public health care system. We conducted a thematic analysis that was both inductive and deductive.

Results: We identified four themes: i) Avoidable factors that contribute to churn often reflect intersecting human resource management issues; ii) Unavoidable factors that contribute to churn frequently result from a decision made by the departing dietitian; iii) High churn in select positions has a disproportionately negative impact on patients served by dietitians in those high churn positions, and iv) Consequences of churn can be long-lasting and result in less efficient dietetic practice and reduced access to medical nutrition therapy. As predicted, prestige was perceived as playing a role in triggering dietitian turnover – however, prestige was more commonly attributed to employment in a respected institution than to providing treatment for a particular disease or condition.

Conclusions: Managers of publicly-employed dietitians identified many factors as contributing to churn. Managers observed churn resulting in low provider continuity and limiting patient access to dietitians. More research is needed to better understand factors contributing to churn among Canadian clinical dietitians.

Trial Registration: Not applicable.

Background

Registered Dietitians are healthcare professionals that have specialized in human nutrition.¹ Unlike nurses employed in hospitals, hospital-based clinical dietitians commonly provide clinical coverage for more than one patient unit.² Relationships between clinical dietitians and other healthcare providers can impact the extent to which patient care is collaborative and the relative efficiency of interprofessional communication; inefficient and ineffective communication can lead to suboptimal patient care.³ For this reason, healthcare leaders should be concerned when there is frequent turnover in a clinical dietitian position serving a unit or unit(s).

With each new clinical dietitian assigned to a role, there is a time lag while the individual becomes acclimatized to the culture and norms of the unit (both clinical and organizational) and builds relationships with other members of the unit(s)' multidisciplinary team. Turnover is typically expressed as the proportion of staff who have moved out of a particular job within the last year.⁴ Staffing turbulence resulting from frequent turnover is called "churn."⁵ To encompass "churn," we are concerned not only with turnover but also temporary absences such as parental leaves and secondments. Few have explored the impact of workforce instability on the performance of healthcare providers⁴ and the peer-reviewed literature reveals little about how characteristics of work settings affect clinical dietitians.⁶

The degree to which clinical nutrition expertise is utilized depends on physicians and other health professionals having a positive attitude toward these services.⁷ In the Canadian public healthcare system, physician referral is the primary avenue for access to clinical dietitian services (whether inpatient or outpatient).¹ In the absence of clear protocols to guide referral or consultation, it is difficult to predict which circumstances will trigger dietitian consultation.^{1,8} Physicians' perceptions of dietitian services will depend, at least in part, on their relationship with the clinical dietitians providing service to their patients. Patient outcomes are improved when health professionals communicate and collaborate efficiently.³ In their first year in a position, only 80% of health professionals felt comfortable providing suggestions to referring physicians; this rose to 100% among those with tenure > 4 years.⁹ The time required for dietitians to build collaborative, trusting relationships with physicians on the unit(s) they serve is extended when the unit is served by multiple physicians.

Consequences of "churn" are not limited to those associated with a reduction in *initial* consultations — such as the prolonged lengths of stay, increased infection rates or delayed healing that can result from malnourished hospital patients not being assessed or referred to the clinical dietitian early in their stay.¹ Longer-term patients may also receive suboptimal care as a result of high churn (HC). Consistency in care provider, or *provider continuity*, is one component of continuity of care.¹⁰ Inconsistent care can decrease a provider's ability to interpret changes in the patient's behavior or appearance and can weaken rapport.^{10,11} Patients may become frustrated at having to repeatedly share their medical history and existing concerns.¹¹ Notably, provider continuity may matter more to patients who are at the end of life, are elderly, have chronic conditions and/or who have complex histories.¹²

Following a systematic review of the literature exploring associations between continuity of care and patient outcomes, van Walraven et al.¹³ concluded that increased provider continuity predicted greater patient satisfaction and improved patient outcomes. More specific to allied health professionals, results from a U.S. study on the impact of provider continuity in outpatient physiotherapy indicated that patients with lower provider continuity were less likely to experience functional improvements and were more than twice as likely to require hospitalization than those who experienced a high level of provider continuity.¹⁰

In this study, we aimed to explore: 1) characteristics of clinical dietetic jobs in the Canadian public sector that are associated with the most churn, and 2) consequences of churn for patients and for managers of

clinical dietitians. Despite the lack of literature available to guide prediction of findings, we hypothesized that the greatest churn would be in general medicine and long-term care (gerontology) clinical dietitian positions. This hypothesis was based on the principal investigator's professional experience as a manager of clinical dietitians and on literature related to variation in the prestige of particular diseases and medical specializations.

In general, categories of disease more common in young patients^{14,15}; those allowing for greater demonstration of "power" (e.g., specialist vs. general practitioner)¹⁴; those whose treatments do not yield helplessness or disfigurement,¹⁵ and; those that can be resolved or cured,¹⁶ particularly via innovative or advanced technological or surgical interventions^{14,17,18} are apportioned greater respect. Lower prestige is conferred on delocalized diseases – that is, those not confined to a particular location in the body.¹⁴ In their study, exploring prestige rankings for somatic and mental disorders among health professionals and the general population, Pettersen et al.¹⁸ concluded that disorders attributed to imperfect lifestyle choices (rightfully or wrongfully) were allocated less prestige.

Researchers have noted that the relative prestige of diseases has remained stable over time,¹⁵ with evidence that general practice and gerontology consistently sit at the bottom of the prestige hierarchy.¹⁹ Additionally, there is striking similarity in scoring across physician and nurse samples²⁰ indicating that a shared order of prestige appraisal exists across health professions. The relative prestige of medical specialties has also been demonstrated as stable over time, with general practice consistently appearing near the bottom of the prestige ranking.²¹

Indeed, physicians-in-training have been said to "learn" from "superiors that certain patients are more deserving of care."¹⁶(pg.15) Narratives informing beliefs about a diseases' prestige are believed to be passed down within medicine's "hidden curriculum"^{16,17,22} wherein physicians' storytelling produces and reproduces prospective doctors' understanding of disease prestige.¹⁷ Hinze²³ explored gender in relation to the prestige hierarchy in medicine and concluded that gender informed how these hierarchies were established – both culturally and socially. As a result, women are overrepresented in less prestigious specialties.²³

Association with a higher prestige specialty or disease can furnish both material and nonmaterial advantages¹⁴ such as greater autonomy, higher pay and elevated social standing.²⁴ Higher prestige specialties and disease conditions are often allocated a disproportionately large portion of available resources (e.g., breast cancer²⁵; neurological conditions requiring surgical intervention [Norwegian Board of Health Supervision as cited by¹⁷]). Thus, patients with lower prestige conditions may receive lower quality care than those with high prestige conditions, which can exacerbate existing health inequities.¹⁴

Although only a small proportion of clinical dietitians have a formal specialist designation (e.g., Certified Diabetes Educator,²⁶ Certified Nutrition Support Clinician²⁷) the prestige of a clinical dietitian position is built-in to positions serving patients diagnosed with high prestige disease conditions.

Methods

This study is part of a larger project which employed both quantitative and qualitative methods to identify key characteristics of jobs in clinical dietetics associated with churn and to assess the consequences of churn for patients and managers of clinical dietitians. This study was approved by the University of Prince Edward Island Research Ethics Board (Ref #6007884). The study took place May to August, 2019. In this article, we will be reporting only the qualitative results.

Sample Selection And Recruitment

Any individual responsible for the management of clinical dietitians (supervising a minimum of three clinical dietitians) in Canada was eligible to participate. The primary investigator (SH) has an extensive personal network of clinical managers across Canada as a result of her clinical dietetics management experience. Additional contacts were identified through the Dietitians of Canada Clinical Managers Network or were identified via a targeted search in LinkedIn™. Additionally, requests for participation, in both French and English, were circulated on SH's Twitter feed.

Those identified as eligible respondents were contacted by e-mail by a member of the research team; a consistent email script and a formal study introduction letter (see Appendix 1) were attached. This was the only information provided to participants re: the purpose and rationale for the research. Those who did not respond to the first request for participation were sent two reminder emails at three week intervals. Respondents were encouraged to pass information about the study along to other eligible respondents. All respondents completed a survey with primarily quantitative questions; the last question was an invitation to participate in a semi-structured telephone interview on the topic of churn in clinical dietetics. All respondents (n = 10) who expressed interest in being interviewed were approached to participate. A low response rate to the invitation to participate in the study eliminated the possibility of purposive sampling.

Questions (Appendix 2) were crafted by SH and CV based on existing literature (e.g.,^{9,14,15}) and on the clinical dietetic management experience of SH. All respondents who completed the interview had completed the survey; however, in order to retain respondent confidentiality, we did not connect demographic information with the qualitative data. All interviews were conducted by female undergraduate research assistants (SC and AO), both majoring in foods and nutrition. Both research assistants had reviewed instructional materials on qualitative interviewing. All researchers involved had completed the Government of Canada's Panel on Research Ethics' online tutorial TCPS 2 Course on Research Ethics. The research assistants had practiced mock interviews with one another as subjects prior to conducting interviews with respondents.

All interviews began with a scripted request for informed consent. Interview respondents were offered a gift card to a Canadian chocolatier valued at \$25 to compensate them for the time they had committed to the project (~ 15–30 minutes). Each interview was conducted one-on-one via telephone and was digitally recorded and transcribed verbatim; recordings and transcripts were uploaded to a secure server for long-

term storage. Each interview was transcribed and then audited for accuracy by another team member. Neither SC or AO had any relationship with participants prior to study commencement. We elected not to calculate inter-rater reliability as it has been repeatedly demonstrated to be ineffective in demonstrating the reliability of qualitative research.²⁸ Respondents were sent transcripts of their interviews for review (member-checking); they were notified that the transcripts would be incorporated into analysis “as is” if there was no response within two weeks. Only one responded with an edit to an acronym used in the transcript. We have lightly edited the presented quotes to remove discourse markers and filled pauses.

Analysis

The analytic approach for this study was both deductive and inductive,²⁹ similar to approaches applied by Ritchie and Banning³⁰ in their study of establishment experiences among LGBT campus support offices and by Fereday and Muir-Cochrane³¹ in their study of performance feedback’s impact on nurses’ self-assessment of their practice. We conducted thematic analysis,³² an approach that facilitates researchers gaining a better understanding of respondents’ influences and motivations and how these impact their responses to events.³³ All research team members gathered after data collection but before analysis to develop an initial codebook³⁴ consisting of X codes and Y sub-codes. Broad categories of codes were also identified and defined.³⁵ Research assistants SC and AO then independently applied the codes identified in the coding tree to analysis of all interview transcripts;³⁴ this systematic analysis required multiple, careful reads and re-reads of the interview transcripts.³⁶ Coding was completed by hand, using coloured pencils, with each color representing the occurrence of a particular code or sub-code. SC and AO each began by coding a single transcript independently and met to compare with the dual goals of: testing the coding tree³¹ and standardizing their approach to coding. Following this, the two continued to independently code the remaining transcripts before meeting again. SC and AO were encouraged to create new codes as needed.^{31,32} Disagreements were discussed until consensus was reached. SH was accessible for consultation in cases where consensus could not be reached.³⁷ Following agreement on code assignment, SC and AO met to input the merged codes into an ExcelTM spreadsheet designed to reflect both the frequency of codes (i.e., number of participants who addressed that code) and the “depth” of codes (i.e., number of times a code came up in the interview transcripts). Codes were examined for commonalities and grouped into themes. Finally, the merged coding documents and table were reviewed for clarity by SH. Examples from the data are shared to allow readers to determine the applicability of findings to their own contexts in accordance with established processes of reporting for qualitative research studies.^{38,39}

Results

Ten respondents from among those who had completed the survey (n = 20) were interviewed. None of the participants elected to withdraw from the study after having been interviewed. Following analysis, we settled on four themes (see Table 1) connecting directly to our stated objectives.

Table 1
Identified Themes

Avoidable factors contributing to churn often reflect intersecting, workplace-specific human resource management issues.
Unavoidable factors contributing to churn are frequently the result of decisions made by the departing dietitian.
High churn in select positions can have a disproportionate negative impact on the specific group of patients served by the dietitian(s) in those positions.
Consequences of churn include lasting impacts on the efficiency of and access to medical nutrition therapy.

Avoidable factors contributing to churn often reflect intersecting, workplace-specific human resource management issues.

The intersecting workplace-specific human resource management issues we identified included manager support, availability of growth opportunities, burnout and/or heavy workload, tension and/or conflict at work and hours of work. All respondents addressed manager support as a factor contributing to (or preventing) churn; they identified both supportive and unsupportive practices and approaches. Manager characteristics and/or practices identified as contributing to churn included inflexibility; micromanagement, such as *“when the manager is too involved and wants to control all of their [a clinical dietitians] activities”* (P07); unresponsiveness, and; inattentiveness. Dictatorial management styles were identified as hindering employee retention, while providing autonomy – including the freedom to make mistakes – was associated with reduced turnover.

A trusting relationship between employee and manager was the most frequently mentioned factor positively influencing retention of clinical dietitians with half of respondents describing the importance of trust. As one manager reported: *“some of the things dietitians have told me is that...they feel like they know that we’ll go to bat for them, that we will stand for them when it’s difficult”* (P07). Five managers felt that their dietitian employees particularly valued their responsiveness in answering questions and in helping them to solve problems they experienced. This included timely action to take clinical dietitians’ problem(s) up as high in the organization as needed to achieve a solution. Managers recognized that staff also appreciated a listening ear, with no expectation of specific action by either manager or dietitian.

Practices associated with employee retention by managers included: providing informal opportunities to “touch base”; exhibiting transparency by clearly outlining expectations and providing rationale for either the status quo or new initiatives; making time for collaborative problem-solving sessions; recognizing dietitian accomplishments and value (individually and collectively); demonstrating empathy during

interactions with staff; treating staff equitably, and; providing active support for clinical dietitians to achieve personal and professional goals. Two respondents felt that an understanding of the role of the dietitian, frequently based on personal experience as clinicians in similar roles, was of value in retaining staff. One manager summarized many key points as follows:

"I think a leader needs to let people do their work... on their own and learn on their own from some of their mistakes... it needs to be a safe environment to try new things, to challenge oneself and then people grow. If not, they leave." (P05)

The presence or lack of opportunities for growth, whether expressed as a desire for expanded skills and expertise, for prestige, or for advancement was reported as a factor impacting turnover by nine of ten respondents. Specifically, clinical dietitians desired *"to have education that sustains practice"* (P01). Managers acknowledged that clinical dietitians often sought *"more challenging roles"* (P02), sometimes in a particular specialization or area of passion for them. Such specialization may not have been attainable or possible within the employing organization. One manager stated explicitly:

"sometimes I think we all move to other health authorities just because there's some interesting positions – there's a potential to specialize in different areas that you couldn't do here" (P03)

Managers most commonly reported prestige or preference as linked to employment in specific, respected facilities, rather than as associated with an individual program or field of practice. One respondent commented on the popularity among clinical dietitians of working at the largest, acute care hospital and how that had led to smaller, community hospitals losing *"some of their dietitians because they want to come here"* (P05). Holding a specialized position at this site was associated with additional opportunities for growth, development and recognition.

In the case of pediatrics, one respondent noted that there was a certain cachet to treating children who *"will do anything they can to get better"* with *"parents who will do anything it takes to make their kids better"* (P09). She noted that in adult care:

"sometimes the conditions are complex and chronic and sometimes actually coming from choices in the past" – "being told you [the patient or client] have to change things is not always welcome, especially when it's having to do with food or alcohol or anything like that" (P09)

In relation to advancement, a manager working in a more rural area noted a lack of positions to form a career ladder within their health authority. In smaller health authorities, there may be very limited turnover in the few existing advanced dietitian roles, which makes it infeasible for others to advance in the organization within the span of their career.

Eight respondents identified burnout and heavy workload as contributors to turnover. One manager reported *"workload that's not congruent with the amount of hours that are expected"* (P01). As a result, staff can experience *"extreme stress or distress coming to work"* as there *"is not enough time to finish"*

their work" (P04). Two managers noted that uneven workload distribution across positions contributed to turnover.

Tension and conflict were noted as factors integral to turnover by seven respondents. Three referred to conflict within the profession, five to interprofessional conflict and two to conflicts in relation to undervaluation of the clinical dietitian role. Conflicts among clinical dietitians can result from having to share "*very small cramped*" (P06) workspace. Such conflicts can be particularly damaging as "*they [clinical dietitians] are supposed to share their workload, cover for each other*" and "*work cooperatively*" (P06). For some returning to the dietetic department could help them to "*escape*" from a hypercritical environment – "*like the gossiping and whatever goes on on the unit*" (P03). This manager suspected that:

this "kind of escape...helps people to be able to stay longer in their positions and have less turnover because...they have support from their coworkers to not get sucked into that kind of attitude" (P03).

Interprofessional conflict was often closely tied to undervaluing the role of the clinical dietitian. Problems can arise when "*other care providers*" try "*to do the work of the dietitian*" or are not "*willing to accept the dietitian as the nutrition professional*" (P07). One manager commented on the current climate, where "*everyone thinks they can do the nutrition component*" (P07) and how this can leave clinical dietitians feeling frustrated. Another manager noted that in the past, on their eating disorders unit, a lack of trust had developed when the clinical dietitian:

"would make a recommendation, leave the unit, go see another patient...come back the next day and their recommendation would not be followed. Something else would have been suggested either by the nurse or pharmacy, physician, whatever, so they—it got to a point where they felt discouraged...why am I trying so hard when I have such a heavy caseload to do my assessments and all those recommendations when as soon as I turn, somebody goes in and changes it and they don't even let me know they disagree, they just go ahead and change it." (P09)

Four managers attributed some turnover to the full-time equivalence of available positions, with some clinical dietitians expressing a desire for part-time and others for full-time. One manager noted that the "*part-time positions don't seem to turn over quite as much*" and that "*once they [clinical dietitians] have a child they tend to want to come back part-time.*" In her experience, part-time positions were coveted by staff but not desired by the organization which had recently merged many part-time positions to form full-time positions (P01).

In contrast, a manager of clinical dietitians in rural areas reported seeing higher turnover in part-time positions, attributing this, at least in part, to the employee-paid expense and time associated with travel to and from work sites. A preference for full-time was echoed by an additional two managers, who both noted that clinical dietitians began in part-time positions and remained only until a full-time position became available.

Unavoidable factors contributing to churn are frequently the result of decisions made by the departing dietitian.

The unavoidable factor contributing to churn we noted as resulting, most often, from a decision (or series of decision) made by a departing dietitian included events relating to life-stage and geographical concerns. Life-stage was noted by seven managers as a reason for turnover. It is well known that dietetics is a female dominated profession and many clinical dietitians are in the *"the time of their lives that they want to start a family"* (P04). Employees will also leave positions *"because their family is moving"* (P05) or *"their husband gets transferred"* (P07). Retirement was also considered an unavoidable reason for turnover. In some instances the health authority can be blindsided by how much a retiring clinical dietitian actually did. One manager described a recent retirement this way: *"when they were trying to package her responsibilities they didn't even know all the jobs she did and some didn't get done and there was risk"* (P06). In some health authorities, most new hires were relocating to a more rural part of Canada where they may experience isolation. This respondent explained that if *"people are here without any family or any of their friends, sometimes that is kind of the issue of why they moved away"* (P03). In other cases, it may be that the geographical coverage area is too large:

"When you give a dietitian too much space to try and cover it is hard for them to make meaningful connections in all of those communities..." and *"until you have someone who actually wants to be in that community, who is from that community, who's got a partner that lives in that community [laughs]...you have lots of turnover in that community."* (P07)

High churn in select positions can have a disproportionate negative impact on the specific group of patients served by the dietitian(s) in those positions.

All respondents indicated that churn had clear negative impacts on clients and patients. These negative impacts were more notable in situations where churn resulted in gaps in service (during which time there was no dietitian coverage for a particular unit or community). Commonly noted issues impacting on clients and patients included: delayed nutrition care, in particular delays triggered by lengthened waitlists and cancelled clinics; prolonged hospital stays, which may have resulted from delayed discharge planning and/or malnutrition, and; less skilled nutrition care while inexperienced clinical dietitians built experience. These impacts were notable even when there was no gap in service as new clinical dietitians were *"usually less efficient at first so there's still fewer people getting seen or it takes longer to get to them"* (P03). A risk of delaying dietitian-provided nutrition care, particularly in outpatient settings, is that:

"when people are waiting a long time to see a dietitian...I believe that they will search out different forms of information and there is a whole pile of it that is not a very high quality in the public sphere, and I think that people may or may not engage in seeing a dietitian if they have to wait too long" (P06).

Importantly, patients or clients with time-sensitive issues/concerns, such as prenatal clients, bear the greater risk when nutrition care is delayed.

Several respondents indicated that *“patients have seen lots of different people [clinical dietitians] and they feel that there’s a lack of continuity”* (P01). One respondent, speaking to practice in the long-term residential care setting indicated that *“residents develop relationships with the staff because”* they *“provide care to people through an extended time period”* and that there may be *“some frustration on the part of patients that they have to catch people up to what their history has been”* (P08)

Some of the impacts of turnover were gap-specific, meaning that they occurred only when there was a vacancy in the position while awaiting a replacement dietitian. Gaps in service were not always the result of failed searches for new staff; *“there is often gap in service between the time a person leaves to the time a new person can come in”* (P02). In rural areas candidates could *“take the better part of a month”* before they were able to report to work (P03). Rural communities could also experience long stretches without access to a clinical dietitian – in one respondents’ observation, communities *“get used to not using the dietitian and then...when we do get a dietitian back in that position, they [the clinical dietitian] have to rebuild the trust and the whole practice that the previous dietitian had”* (P07).

Consequences of churn include lasting impacts on the efficiency of and access to medical nutrition therapy.

According to respondents’, lasting impacts on the efficiency of and access to medical nutrition therapy resulted from corollary strain following turnover, churn-triggered tension and conflict, and nutrition department-specific costs of turnover. Ultimately, burnout and high workload were identified as both a trigger and consequence of turnover. All managers indicated that there was corollary strain related to turnover which impacted on their own workload and job quality, while nine identified similar effects on remaining team members (including clinical dietitians). A common sentiment was that managers were *“constantly recruiting new staff”* (P01). Recruitment and hiring were *“quite a process...from getting approvals and getting job postings to interviewing”* (P02), training and orientation. These tasks took *“time away from actually leading practice, addressing practice issues and looking at...expanding programs, securing funding...making proposals to advocate for the profession”* (P04). This undone work was seen as leading to the perpetuation of circumstances where coverage of particular units or programs remained insufficient to meet the nutrition needs of clients and patients.

Various impacts on the team were reported to result from having to pick *“up the slack for people that have gone on”* (P02) and/or from the increased workload associated with training new staff. New staff may not receive high quality, comprehensive training if the dietitian providing their training is struggling with a heavy workload and burnout. Staffing changes can create a *“domino effect”* (P09) where multiple people shift positions as a result of the first turnover event. One manager noted how the team must adapt when there is turnover and learn to *“trust the new person coming in”* (P09); churn can *“decrease trust from the unit level in our department because we aren’t able to meet the demands of the unit”* (P10).

Three managers commented on team dysfunction that could result from churn. In rural locations, frequent turnover in what may be the only position serving the community can result in loss of *“the trust of the community”*(P07) so that the clinical dietitian is no longer sought out to participate in client-care or

program development because community members begin to think: If the dietitian is only going to be here “*a couple of months...why would we bring her[or him]into these conversations*” (P07)? This can result in the loss of “*opportunities to make a difference in the community*” (P07). In other cases, it may be that non-dietitian staff step in to fill the void during recruitment and orientation post-dietitian turnover and then have difficulty stepping back once the new clinical dietitian is practice-ready (P09).

Three managers also called attention to the high cost of turnover. One noted how when turnover is high she has “*to train more*” (P01), which drains her budget for dietitian relief. As a result, remaining clinical dietitians may no longer have had access to workload relief or back-fill when needed.

Discussion

We have achieved our aims by: i) identifying key characteristics associated with HC jobs in clinical dietetics, and; ii) determining key consequences of churn for both patients and managers of clinical dietitians (see Table 1). It is clear that there was no single factor that differentiated a HC position from a LC position. The factors identified by managers were consistent with those reported in Halter et al.’s⁴⁰ systematic review of systematic reviews as being linked to job turnover and job turnover intentions among nurses. We were unable to locate research that specifically explored associations between job characteristics and the volume of turnover in a particular type of clinical dietitian position (e.g., positions treating a specific disease or serving a particular subset of clients).

It is clear that turnover is not entirely avoidable, nor would it be optimal to eliminate it. In their theoretical cost-benefit framework of turnover, Abelson and Baysinger⁴¹ asserted that the relationship between organizational performance and employee turnover was U-shaped. That is, just as too much turnover can have a negative impact on organizational performance, so too can too little.⁴¹ Ideally, those contributing most to the goals of the organization will remain and those contributing less than their fair share will elect to leave. Without doubt, however, is that disproportionate turnover that systematically disenfranchises a particular, vulnerable subset of the population should be avoided.

Certain forms of turnover, whether temporary or permanent, contribute to the social good. For instance, the mandate to provide maternity and parental leave is consistent with intentional legislative strategy to increase fertility rates and achieve gender equity.⁴² Reported impacts of retirement on health are mixed,⁴³⁻⁴⁵ with some researchers indicating that retirement is associated with health improvements⁴⁶⁻⁴⁸ and others indicating that retirement negatively impacts health.⁴⁹⁻⁵¹ Regardless, retirement is likely to remain a standard stage of Canadians work lives; this is especially true in healthcare, where employer-provided pension plans often incentivize early retirement.⁵²

Several respondents identified prestige as a factor contributing to churn. Rather than specifying patient type or disease treated, managers attributed “desirability” to particular institutions – typically large institutions providing specialized acute care services. Employment in these institutions was tied to opportunities for growth and the capacity to have a far-reaching impact on clinical dietitian practice.

Increased stature may come to any dietitian employed in those institutions, regardless of the patient population they serve or diseases they treat.

Only one respondent hinted at the role that patient “*deservedness*” may play in determining the desirability of a clinical dietitian position. In this case, it was connected to the age of the patient or client (pediatric vs. adult). The idea that clinical dietitians may experience more negative feelings when treating patients whose condition is perceived to result from past choices is congruent with Norredam and Album’s¹⁴ interpretation of disease prestige as, at least partially, resulting from healthcare professionals’ impulse to attribute blame to certain groups of patients for their illness. Higashi et al.¹⁶ concluded that, in the case of physicians, perceptions of patient deservedness were passed down by superiors to medical students and residents during training. Such perceptions may be similarly passed down in the health professions, which also rely, at least in part, on preceptor-led training to prepare students for practice.

Provider continuity, demonstrated in other studies to improve patient outcomes,¹⁰⁻¹³ was noted by managers to be desirable in dietetic practice and was conspicuously lacking where churn was high. Delays in provision of nutrition therapy by a dietitian can have significant consequences: both financially – for the health system and the individual patient or client,^{53,54} and medically – in the form of increased morbidity and mortality associated with malnutrition.^{54,55} Following analysis of prospective cohort data collected in Canadian hospitals, Curtis et al.⁵³ concluded that patients assessed as being severely malnourished (11%) had 53% longer lengths of stay and medical costs 55% higher than those of well-nourished patients. Likewise, results of a study by Keller et al.¹ indicate that malnourished patients seen by a clinical dietitian early in their hospital stay had decreased rates of infection, improved healing and reduced lengths of stay.

Strengths And Limitations

There were some limitations inherent to our design. In particular, we spoke only with managers and so cannot be sure that managers’ perceived causes of churn in clinical dietetic positions are the same as those that would be identified by clinical dietitians. That being said, the majority of managers will have worked as clinical dietitians, often in the same institutions that their staff currently work in. All will have made choices to change jobs even if only to move from a previous position into their managerial position. For many, these decisions will have been fairly recent, as the majority of survey respondents had ≤ 5 years of management experience.⁵⁶ For this reason, they have significant insight into factors impacting clinical dietitians’ job-related decisions. In order to preserve confidentiality in the reporting of our qualitative results – particularly for rural and remote managers – we chose not to link respondent’s survey results (including demographic information) to their interview data. Linking the two could have provided us with a deeper understanding of how geographic location, number of dietitians managed and a manager’s demographic characteristics impact their views on the predictors and consequences of churn.

It is difficult to say how reflective our sample is of the broader population of Canadian clinical managers as respondents' demographic information was not linked to their interview responses. Also, there exists no register of clinical dietetics managers in Canada. Survey respondents were from across Canada, with nine of ten provinces represented and zero of three territories.⁽⁵⁶⁾

In employing qualitative methodology to explore the question of contributors and outcomes of churn in clinical dietetics, our goal was not to produce generalizable results. Rather, we hope that future research can build on and assess the consistency of these themes as they relate to churn in clinical dietetics.

We are also aware that there are differences in the reporting structure for clinical dietitians across Canada that may make interpreting the role of managers in preventing churn difficult. In some institutions and health authorities, clinical dietitian management is centralized and profession-specific so that all clinical dietitians report up within a nutrition "silo" (e.g., Alberta). In others, clinical dietitians are more likely to be managed in their programs or units, with Professional Practice Leaders providing auxiliary, profession-specific support to clinical dietitians embedded in teams across the institution or health authority (e.g., most of British Columbia).

Conclusions

Canadian managers of clinical dietitians identified many factors contributing to churn in their organization. As predicted, managers did perceive prestige as playing some role in triggering churn. This had less to do with prestige inherent to a particular disease or patient population and more to do with the reputation and size or scope of an institution. Our respondents consistently indicated that low provider continuity arising from churn had impacts on patient and client access to clinical dietitians. Future research could focus on prospectively identifying positions in multiple areas and settings before conducting in-depth, multi-method analysis of the settings and work environment, while objectively measuring turnover over time. Alternately, it may be interesting to select several positions with high churn and interview all individuals who held that position about their experience in the position and the impact of job characteristics on their decision to leave; such comparative analysis may reveal new or unexpected factors that contribute to churn.

Abbreviations

HC: high churn

LC: low churn

Declarations

Ethics approval and consent to participate

Ethics approval was provided by the University of Prince Edward Island Research Ethics Board (Ref #6007884). Each respondent signed a consent form after having reviewed the Information Letter provided at the time of survey submission. Interviewees also provided verbal consent at the beginning of the semi-structured interview.

Consent for publication

As part of the verbal consent script reviewed at the beginning of each semi-structured interview, respondents were informed of publication plans in this way: "If you choose to participate your responses will be confidential and information that identifies you will not be used in any report of the findings. It is possible that we may use a quote from your interview in a report or paper but we will ensure that your confidentiality is maintained by not including any identifying information (such age, location or employer). You will be assigned a code number and your name will not be used."

Availability of data and materials

The datasets generated and/or analyzed during the current study are not publicly available as consent from respondents was limited to review and analysis of findings by the principal investigator (SH) and/or students of the principal investigator. Data would be available from the corresponding author on reasonable request.

Competing Interests

No one on the research team has any competing interests to disclose.

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Author's contributions

SH and CV secured the funding for the study. SC and AO conducted the interviews, transcribed from recordings and audited all transcripts. SC, AO, SH and CV developed the codebook guiding analysis. SC and AO conducted the bulk of the analysis with oversight by SH and CV. SH wrote the first draft with contributions from SC, CV and AO. All authors reviewed, commented and added to subsequent drafts of the manuscript.

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