

Development of rehabilitation services in an Inuit sociocultural context: challenges, strategies and considerations for the future

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ABSTRACT

In recent years, a new rehabilitation programme has been developed on the Hudson Bay coast of Nunavik. The purpose of this article is to reflect on the experience of an occupational and physical therapy programme development in an Inuit sociocultural context. To do so, the challenges encountered during the first years following the implementation of rehabilitation services and the strategies implemented by the professionals to overcome them were identified, examined in the light of the literature, and discussed with members of the rehabilitation team. The challenges encountered and strategies implemented were divided into 10 major themes: (1) diverse clinical needs; (2) communication issues; (3) acquisition of cross-cultural interaction and population-specific knowledge; (4) adaptation of clinical practice to Nunavimmiut; (5) client engagement in rehabilitation; (6) professional isolation; (7) lack of awareness around the objectives and scope of rehabilitation practice; (8) use of culturally safe assessment tools; (9) staff turnover; (10) large geographic area to be served. This exercise highlighted the need to adapt clinical rehabilitation practices to Nunavimmiut's worldviews and culture, as well as to adopt a reflective practice in order to improve the quality, relevance and effectiveness of rehabilitation services.

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Introduction

In recent years, shortcomings in access to services and in the quality of health care offered to Indigenous communities have been publicly acknowledged in Quebec and Canada [1,2]. More specifically, the failure to offer culturally safe services and the lack of community resources for Indigenous people with special needs, such as physical or intellectual limitations or specific psychosocial needs, have been revealed [2]. In Nunavik, the *Qanuilirpitaa?* (How are we now?) health survey conducted in 2017 revealed that only 57% of Nunavimmiut (residents of Nunavik) considered that health services were sensitive to Inuit realities, while 81% said that more culturally adapted services were needed [3]. The survey also reported that 19% of Nunavimmiut had suffered an injury resulting in a limitation of their usual activities in the year prior to the survey [4], compared to 12.4% of the rest of the Quebec population [5]. In addition to a higher prevalence of accidental injuries, higher rates of certain cancers and other health problems are considerably higher than average rates for Quebec [6]. Despite the

significant health care and rehabilitation needs in Nunavik, the lack of numerous health services at the local level is reported in this region [6].

It is in this context that a new rehabilitation programme was developed in 2017 in Nunavik. The rehabilitation professionals responsible for the development of this programme were not from the Inuit community. Moreover, only one of them had experience of intervention in an Inuit environment. In a context where the needs are great, but where there is a cultural gap between professionals and Inuit clients, how is it possible to develop culturally safe and effective rehabilitation services that take into consideration the characteristics, needs, realities and aspirations of Nunavimmiut?

The answer to this question inevitably lies in the acquisition of population-specific knowledge and the implementation of adapted practice recommendations [7]. However, there is a worrying absence of useful and reliable data on disabilities and health problems in Indigenous populations in Canada [8]. There is also

a lack of a clear and comprehensive practice framework on the provision of culturally safe rehabilitation services for those populations [8,9]. In this regard, the studies that have been conducted specifically on rehabilitation with Canada's Inuit populations focus on clinical challenges but offer few strategies or courses of action for adopting a culturally safe practice [10,11].

This article presents a reflection on the experience in developing an occupational and physical therapy programme in a health centre located on the Hudson Bay coast of Nunavik, a culturally complex northern Indigenous health care setting. This article aims to contribute to providing better and culturally safer rehabilitation services in Inuit communities by using the lens of cultural reflexivity, which can help to improve health and reduce health disparities [12]. In this regard, there is a growing recognition that health professionals and health care organisations contribute to ethnic inequities in health care and that cultural competency and cultural safety at both individual health practitioner and organisational levels is essential to improve health and reduce ethnic health disparities [13].

The article is structured in three sections. First, the context of health and rehabilitation services in Nunavik is described. Then, the challenges encountered in the first four years of providing rehabilitation services and the strategies put in place to overcome them are presented. Finally, lessons learned from this process are presented.

Context of health and rehabilitation services in Nunavik

Health services in Nunavik

Nunavik is one of the four Inuit land claim regions that comprise Inuit Nunangat. The population of Nunavik is 13,188, including 11,795 Inuit [14,15] who live in 14 communities with populations ranging from 210 to 2755 [16] (Figure 1). Health care in the region is administered by the Nunavik Regional Board of Health and Social Services, an Inuit-governed public institution developed under the James Bay and Northern Quebec Agreement [17]. Services are provided by professionals who generally come from southern Quebec and who



Figure 1. Map of Nunavik. *Authorisation to use this map received by the authors.[20].

are non-Inuit [7,18]. It should be noted that *southern* refers to the urban region located in the south of Quebec while *northern* refers to the remote region located in the north in Inuit territory. Two health centres serve the 14 communities of Nunavik: the Inuulitsivik Health Centre and the Ungava Tulattavik Health Centre, providing services to the Hudson and Ungava coasts respectively [19]. All communities have a local community service centre which offers front-line health and social services [19]. This article focuses on the development of rehabilitation services at the Inuulitsivik Health Centre which covers the seven Hudson Bay communities; Kuujuaapik, Umiujaq, Inukjuak, Puvirnituaq, Akulivik, Ivujivik and Salluit.

History of rehabilitation services at the Inuulitsivik health centre

Prior to the implementation of the rehabilitation programme in 2017, a physiotherapy technician employed by the People in Loss of Autonomy programme was stationed at the Inuulitsivik Health Centre and mainly provided home support services. Occupational therapists and physiotherapists from the McGill University Health Centre would come to Nunavik for a fortnight twice a year to work with other rehabilitation clients. People requiring urgent rehabilitation follow-ups were obliged to travel to Montreal. From April 2017 to November 2018, an occupational therapist, two physiotherapists (one full-time and one part-time) and a second physiotherapy technician came on board to develop a more comprehensive rehabilitation services offer. All those professionals were trained in southern Quebec and have a professional licence to practice in Quebec. A rehabilitation assistant from the Inuit community also started work in May 2017. The use of the term “rehabilitation” in this article therefore refers to the services offered by all these professionals.

Organisation of rehabilitation services

The rehabilitation professionals are based at the Puvirnituaq hospital where they have workstations and a large rehabilitation room. The two physiotherapy technicians each cover three communities in addition to Puvirnituaq, while the physiotherapists and the occupational therapist cover all seven communities. The rehabilitation assistant is based in Puvirnituaq where he performs various clerical tasks, acts as an interpreter, prepares and maintains equipment and supplies, and assists in activities for the rehabilitation of clients as directed by rehabilitation professionals. The professionals’ stays in each of the communities can vary

from a few days to two weeks, depending on the needs and the availability of accommodation and premises. In occupational therapy, the frequency of visits to a community varies from one to three times a year, while in physiotherapy it is four to six times a year.

Clients served

Rehabilitation professionals are responsible for serving clients of all ages with a wide variety of health problems. More specifically, the conditions most seen in rehabilitation are musculoskeletal, rheumatological or neurological disorders, developmental delays and other disorders associated with a paediatric clientele, dysphagia, cognitive difficulties and reduced autonomy.

Practice context

Rehabilitation services for clients with musculoskeletal or rheumatological disorders are mainly provided in the rehabilitation department of the Puvirnituaq hospital or in the premises of the local community service centres during community visits. People with a loss of autonomy are seen at home or in the two seniors’ residences, while the few clients requiring intensive functional rehabilitation are seen in the hospital’s care unit. The children are seen mainly in schools, daycare centres or in the premises of community resources involved with them.

Methodology

The challenges encountered during the first four years following the implementation of the rehabilitation programme on the Hudson Bay coast and the strategies put in place by the professionals to overcome these challenges were first identified in the winter of 2021 by one of the members of the rehabilitation team, who is also the first author of this article. She has been an occupational therapist for the Inuulitsivik Health Center since the creation of the rehabilitation programme in 2017. A literature search was then carried out from February to June 2021 by this professional to deepen the reflections on the challenges encountered, to validate the relevance of the strategies tested to date and to identify new courses of action that could prove promising. To locate published primary research studies and literature reviews addressing the subject of this paper, a search was done on four databases, namely Arctic Health, Google Scholar, Native Health Database and PubMed. Major concepts in the search strategy were related to rehabilitation services and Inuit populations. A screening of the reference lists of selected

articles was then carried out. As few articles were located, the search was broadened to health services in an Inuit context and to rehabilitation services in a cross-cultural context. The challenges and the strategies identified at the beginning of the process were further developed and reorganised into themes following the reading of the articles and the discussions with the co-authors who present backgrounds in medical anthropology, public health and rehabilitation. New strategies to overcome the challenges were identified and added to those themes. Finally, a meeting with three other members of the rehabilitation team was conducted at the Puvirnituk hospital in June 2021 to gather their perspective on the challenges and strategies identified and to share new courses of action identified in the literature. The members of the rehabilitation team that participated to this meeting are a physiotherapist and a physiotherapy technician that both work for Inuulitsivik Health Centre since 2018 and an occupational therapist that works for the centre since 2020. Those professionals agreed with the challenges and the strategies identified and provided relevant comments that helped enrich the reflection.

Results

The challenges encountered and the strategies implemented by rehabilitation professionals were divided into 10 major themes (Figure 2). The concept of *challenge* refers to the elements that proved to be difficult for the rehabilitation professionals, whereas the concept of *strategy* refers to the actions undertaken or that could be undertaken to overcome these challenges. It should be noted that the challenges and the strategies were not prioritised in their order of presentation. The strategies presented are an amalgam of those already implemented by the rehabilitation team and of new ones identified in the literature (Figure 3).

Responding to a variety of clinical needs

Challenge

At the beginning of their Nordic career, rehabilitation professionals felt little or not at all equipped to deal with the wide range of clinical conditions in Nunavik. Acquiring a multitude of new clinical skills quickly became crucial as the clients served included individuals of all ages and diverse conditions. This challenge has been reported by a variety of health professionals starting their practice in the North [7,11,18,21–23]. Additionally, given the limited resources and inconsistent presence of professionals in the communities, therapists are sometimes asked to perform tasks

outside their professional field, which has also been reported in the literature [18,23].

Strategies

To support the rapid acquisition of skills and thus be able to respond to a variety of clinical needs, the members of the rehabilitation team put in place a number of different strategies. First, professionals have completed training and courses on a wide variety of clinical conditions and intervention techniques. Additionally, to guide their clinical decisions, they regularly search the Internet and use of the UpToDate database, which is accessible through the workplace. Then, in the months following the implementation of the rehabilitation programme, they carried out observation days in various specialised practice settings in and around Montreal (e.g. hand clinic, dysphagia clinic, etc.). In addition to building the capacity of northern therapists, these shadowing days helped to create a network with southern rehabilitation professionals from different fields, a recommended strategy for northern health professionals [21]. Nunavik therapists still regularly exchange information with Montreal professionals by email, telephone or videoconference to obtain clinical support for more complex issues. They can also share information about the cultural and environmental context of Nunavik when Nunavimmiut receive services from southern professionals. Such sharing is recognised as a way to improve the quality, cultural relevance and continuity of services offered to Inuit clients during their episodes of care [24].

Managing to communicate across language barriers

Challenge

Rehabilitation professionals and Inuit clients interact primarily in English, a second language for most; Inuktitut is the mother tongue of more than 87% of Nunavimmiut [14] while French is the mother tongue of all the rehabilitation professionals. It should be noted that some Nunavimmiut are unilingual in Inuktitut. Moreover, when the therapists arrived, they were not familiar with the cultural communication norms of their host community. Communication challenges between clients and service providers are a significant source of frustration for both clients and professionals [25]. Language differences can create barriers for patients trying to express their emotions and convey their illness and symptoms, as well as compromising information or instruction provision [21,25,26]. These communication



Figure 2. Overview of the 10 major themes of the reflective process.

challenges may also impact on the establishment of rapport and engagement in therapy [21,26].

Strategies

To overcome communication challenges, members of the rehabilitation team regularly work with interpreters, a strategy also put forward by professionals working in similar settings [22,23,26]. Interpreters are local employees of the Inuulitsivik Health Centre with a range of responsibilities. In addition to regular Inuulitsivik Health Centre employees, clients' relatives and other community workers may also act as interpreters during interventions at home or in the community. In all cases, interpreters often play a role that goes beyond language translation, providing important information about the social and family context of clients, cultural communication norms and local traditions [22,23]. In addition, the therapists have learned certain key words and phrases in Inuktitut, which can help in establishing and maintaining therapeutic relationships [26]. Finally, rehabilitation professionals try to pay more attention to non-verbal communication, a strategy also used by other professionals working in cross-cultural settings [26].

Acquiring cross-cultural interaction and population-specific knowledge

Challenge

Most of the rehabilitation team members had no experience working in Indigenous communities before they started working in Nunavik. Prior to their employment, two of the four members received a three days pre-departure training on Inuit culture and life in Nunavik. While relevant, this brief training left many professionals unprepared for the social and cultural challenges of practising in Inuit communities [22]. Then, upon arrival in Nunavik, rehabilitation professionals invested a great deal of time and energy in the acquisition of clinical skills, which left little room for the acquisition of knowledge about cross-cultural interaction and the characteristics, needs and realities of Nunavimmiut. It was only after some time that the knowledge gaps became evident, as is often the case for professionals beginning their practice in northern communities [7]. However, acquiring knowledge at this level proved to be more complex for a number of reasons, including the difficulty of accessing scientific literature in the workplace and to take the time to conduct such research in day-to-day clinical practice. These difficulties have also been reported by other professionals working in similar settings [7].

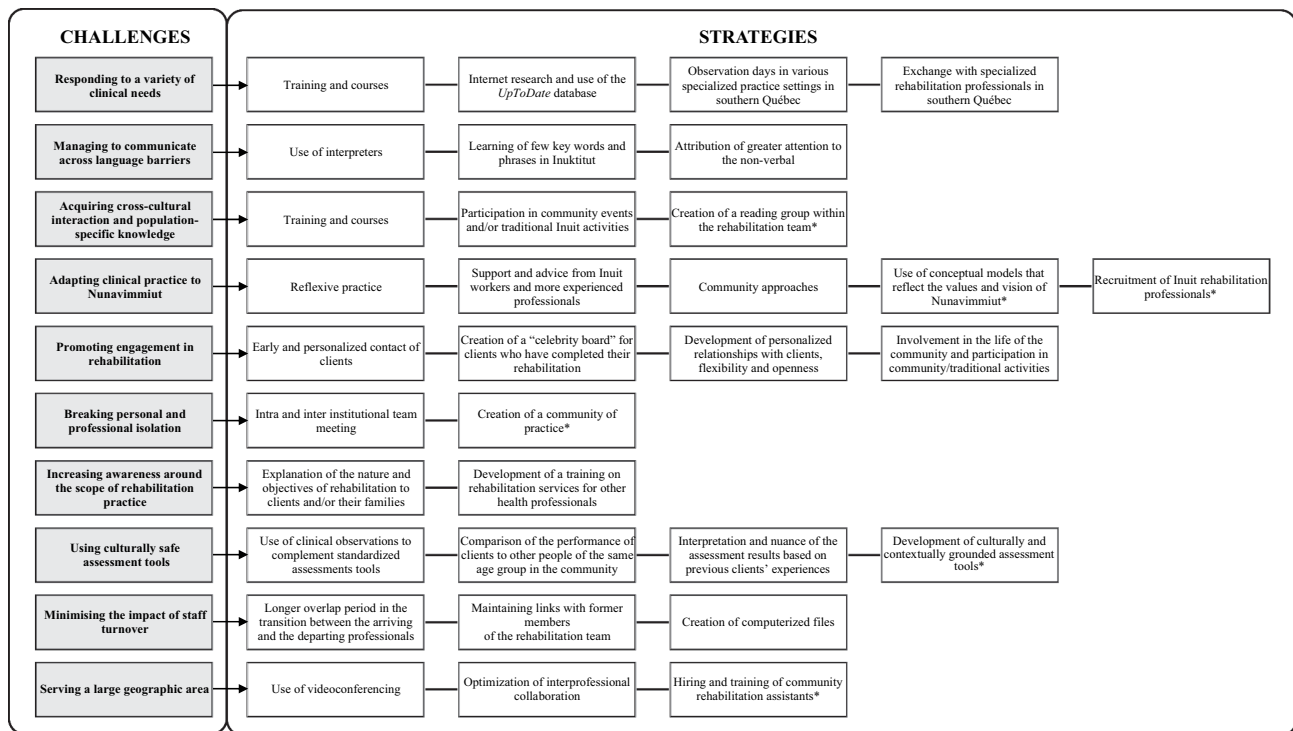


Figure 3. Overview of the challenges encountered and of the strategies identified

Strategies

In order to foster cross-cultural interaction and population-specific knowledge, most of the rehabilitation team members attended training and courses on cross-cultural intervention in an Indigenous context as well as on Indigenous communities of Northern Quebec. In addition, the professionals participated in community events and/or traditional activities, which is another way to learn about Inuit culture [22,23,25]. Finally, to address the challenges associated with acquiring knowledge through the scientific literature, professionals considered creating a team reading group to support each other in the search for relevant literature and to discuss ways to integrate the proposed strategies into daily clinical practice. Such a reading group has not been created yet. The implementation of this strategy would be greatly facilitated by improved access to scientific literature in their workplace.

Adapting clinical practice to Nunavimmiut

Challenge

Differences in worldviews and values between rehabilitation professionals, clients and Inuit communities have emerged through follow-ups and suboptimal clinical situations with some clients. Rehabilitation professionals such as occupational therapists from Western society often focus on independence. However, far

from universal, many cultural groups have quite different modes of being and understanding health, disease and disability [23,26,27]. It has been noted that for many Indigenous peoples, the health and well-being of the individual are closely associated with the health of the culture, the land, the community and the spiritual world [28,29]. More specifically, in Nunavik, the *Qanuilirpita?* health survey highlighted the role of language and culture in the experience and description of health and well-being, as well as the importance of family and community cohesion, cultural identity, access to and use of the land, among others [30]. Differences in views and values can create difficulties and frustrations for both professionals and clients and disrupt therapeutic relationships [31]. For example, a client who arrived for his appointment 30 minutes later was upset to find that the therapist who was supposed to see him had left for a home visit to see another client. The latter refused to have another appointment with the therapist the following day. Additionally, differences in views on what is necessary or normal for clients to be able to achieve can cause clients' goals to be inconsistent with what therapists perceived to be a higher priority [23]. For example, a man in a wheelchair wanted to learn how to transfer in the box of a pick-up truck or in a *qamutiik* (sled that can be pulled behind a snowmobile) in order to be able to go around the community and eat at relatives' house

while the therapists thought it would have been more useful to work on the client's ability to prepare food at home. Services that do not meet specific clients' needs can decrease their trust and openness towards service providers [21] and impact on access to care and treatment compliance [26]. In addition, interpreting clients' decisions and events in therapy from a Western perspective can lead to judgements of passivity [27]. For example, a mother who preferred to rely on prayer and God's love to help her daughter with multiple medical conditions and significant developmental delay was perceived as passive and non-adherent by a member of the rehabilitation team early in the process. For most members of the rehabilitation team, these differences in views and values brought forth a tension between respecting the foundations of their profession and what they learned at university and adopting a practice focused on the needs, culture and realities of Nunavimmiut. This tension has been reported by other professionals working in Indigenous communities [32] and in non-Western settings [27]. Sometimes, the experience of cultural difference proved confusing and unsettled the professional identity of the therapists as well as the *raison d'être* for their professional involvement in Nunavik.

Strategies

Rehabilitation professionals first and foremost try to reflect on their practice as a strategy to improve the cultural relevance of interventions. Reflexive practice has been identified as essential to provide culturally safe, relevant and effective care [9,13,32,33]. Reflexivity requires a thorough examination of one's values, culture, prejudices, beliefs, biases and the influence of these elements on the services offered [9,13,32,33]. To do so, the therapists try to examine themselves and maintain open dialogues and discussions among the team to share their thoughts and feelings. In addition, rehabilitation team members attempt to seek support and advice from Inuit workers and professionals with more experience in Indigenous settings. Fraser et al. [25] emphasise the importance of working with Inuit workers, cultural consultants, or non-Inuit service providers who have established trusting relationships with the communities over the years, to adopt more culturally appropriate practices. The therapists also observe the approaches of Inuit workers and other health professionals with more experience and apply them in their own practice. In addition, the members of the rehabilitation team try to favour community approaches with specific populations such as children by carrying out follow-

ups at school or on the premises of community organisations. Carrying out follow-ups in natural environments favours collaboration with local workers or the clients' relatives who, like the interpreters, can provide information on the clients' social and family context and act as cultural mentors. It also allows for a more natural involvement of clients' extended families in the therapeutic process, which has been identified as an important need for Inuit clients [23]. It also allows to find common solutions and develop an intervention plan that is truly relevant to the unique context of the client. The literature also shows that it is necessary to consider Indigenous models and definition of health in addition to those employed by the dominant culture [34]. The use of conceptual models that reflect the values and world visions of Nunavimmiut would therefore be highly relevant to allow professionals to better understand how Inuit perceive health and well-being. For example, the *Ilusirsusiarniq Qanuinnngisiarniq Inuuqatigiitsianiq* (IQI) model could be used to develop health interventions that are better adapted to the Inuit sociocultural context of Nunavik [30]. The IQI model was developed in 2021 by Fletcher et al. following the analysis of the *Qanuilirpitaa?* health survey that focuses on the vision of health and well-being in Nunavik communities [30]. The use of its key concepts in rehabilitation practice could improve the relevance of interventions and promote the engagement of clients in the therapeutic process. Finally, the recruitment of rehabilitation professionals from the Inuit community would be a very promising strategy to adapt clinical practice to the needs and realities of Nunavimmiut and to improve the quality of services offered, in accordance with the recommendations of the Truth and Reconciliation Commission of Canada [1] and the Public Inquiry Commission on relations between Indigenous Peoples and certain public services in Quebec ("Viens Commission") [2]. However, recruiting Inuit staff is a challenge, as the Ministry of Health and Social Services (Quebec) standards require a university degree for many functions and few Inuit have completed university studies leading to a professional designation [2]. Rehabilitation professionals could participate in activities to promote the rehabilitation professions in the communities, such as the career days organised by the Kativik School Board to promote their profession to Inuit students. Systematic and long-term investments in training Indigenous health professionals are showing good results in medicine and may presumably be extended into other domains [35].

Promoting engagement in rehabilitation

Challenge

There has been a significant rate of absenteeism for occupational therapy and physiotherapy appointments. The amount of absenteeism varies according to the season, the community and the method of contact for making appointments. Such absenteeism has been reported by other rehabilitation professionals working with Inuit communities [10]. One of the reasons for these engagement difficulties may be issues of trust in rehabilitation professionals. Indeed, some authors report that a lack of trust in non-Inuit health professionals can be evidenced by a reluctance to access services [8], to attend appointments or to engage in the therapeutic process [23]. This lack of trust may be associated with a history of colonialism [21,23], previous culturally inappropriate interactions with the health system [23], concerns about information being shared with other community members and a fear of feeling judged by health professionals [36]. The *Qanuilirpitaa?* health survey reported that only 76% of Nunavimmiut had confidence in health services [3]. Although no study has specifically looked at Nunavimmiut trust in rehabilitation professionals, it is possible to believe that a portion of the Inuit population has difficulty trusting these therapists as well. Absenteeism may also be exacerbated by different cultural understandings of the nature of the health issue, partially explained and understood therapeutic objectives, and social and familial responsibilities that interfere with appointment keeping.

Strategies

Rehabilitation professionals have implemented several strategies to improve client confidence and commitment in the therapeutic process. An early and personalised contact with the rehabilitation team has been implemented to allow the client to meet his future therapist and thus encourage him to attend his appointment. To this end, when a doctor or other member of the medical team notices that a rehabilitation follow-up would be relevant during a medical consultation, he or she tries to introduce the client directly to the rehabilitation team. Additionally, a “celebrity board” for clients who have completed their rehabilitation has been set up to arouse the interest and motivation of clients to attend their appointments and to get involved in their therapeutic process. Furthermore, therapists try to take the time to develop relationships with clients. To do so, they offer to carry out therapies in environments in which clients feel safe (e.g. home, school, etc.) and to

participating in clients’ daily activities (e.g. driving a client to the local grocery shop, sharing a meal, etc.). They also attempt to be open to change the time or place of appointments and to see clients when they come to the clinic, even if they do not necessarily have an appointment. Being flexible, spontaneous and open has been identified as conducive to creating meaningful and positive relationships [23,25,26,32]. According to Byrne et al. [32], “professionalism is not about arms-length, inauthentic behaviour where your agenda is number one. Professionalism in Indigenous territory [...] it’s being human first and a practitioner last”. In this regard, Fraser and Nadeau [36] mention that the interactions described as the most meaningful and satisfying by the beneficiaries were those considered friendly and egalitarian where a bidirectional sharing was possible. In addition, professionals also try to get involved in the life of the community and participate in some of the community and traditional activities, which can help build trust and positive relationships [25,36]. On the other hand, certain contextual realities, such as the high workload and the inconsistent presence of professionals in the communities may limit therapists’ willingness and ability to establish optimal relationships with their clients and communities. In addition, it is important to mention that there is a certain ambivalence and complexity regarding the participation in traditional Inuit activities and the use of Inuktitut words by non-Inuit workers. Indeed, these actions may be perceived as a form of respect by some Nunavimmiut, while they may be seen as a lack of authenticity and an attempt to appropriate cultural activities by others [25].

Breaking personal and professional isolation

Challenge

Most rehabilitation professionals have experienced a sense of personal and professional isolation at times during their northern practice. The burden of being the only representatives of their discipline to deal with complex issues in a context of minimal support and resources has sometimes proved to be a heavy for these young professionals. This challenge, coupled with being at a long distance from the family and loved ones, is a significant barrier to staff retention [21].

Strategies

As a way to break personal and professional isolation, members of the rehabilitation team meet regularly on a formal or informal basis to share successes and to obtain social support in more complex clinical or relational situations. In addition, they have tried to set up

annual or biannual meetings via videoconference with the rehabilitation team of the Ungava Tulattavik Health Centre, the other health centre in Nunavik. These meetings were intended to promote inter-institutional knowledge sharing and professional development. However, due to COVID-19 and staff turnover, these meetings did not take place during 2020. The resumption of these meetings and the maintenance of these contacts would, however, help counter the risks of isolation specific to health professionals working in a northern environment [21]. Finally, the creation of a community of practice based on the *Atautsikut* model (togetherness) would also be promising. *Atautsikut* is a community of practice that brings together workers involved in youth mental health and wellness from different villages in Nunavik to exchange, share, support, learn from and inspire one another [37].

Increasing awareness around the scope of rehabilitation practice

Challenge

A partial understanding of the role, goals and approaches of rehabilitation professionals was observed on the part of both Inuit clients and other health care providers. On the client side, it was noted that they were less familiar with the approaches put forward by rehabilitation professionals, such as the use of exercise programmes, functional activities or games as therapeutic mediums. An example of this is a client with carpal tunnel syndrome who was disappointed to be offered a brace and exercises by the occupational therapist as he expected medication or surgery. On the part of other health care providers, a lack of awareness of the scope of rehabilitation practice and the specific role of each of the rehabilitation therapists was observed. A lack of understanding has also been reported by other rehabilitation professionals working in cross-cultural settings [11,23,27]. This can have an impact on the investment of clients in the therapeutic process and lead to difficulties in interprofessional collaboration, which can affect the quality of services [27].

Strategies

Rehabilitation professionals have developed several ways to address this difficulty, the most obvious of which is to try to take the time to explain their role and the nature and objectives of rehabilitation to clients and their families. Whenever possible, professionals try to do this at the time of appointment by telephone or in person to encourage clients to come to their therapy. Fostering a better understanding of what is involved in assessments and treatments as well as the

purpose of therapy has been identified as facilitating in cross-cultural settings [26]. Therapists have also developed a short presentation for other health professionals on the objectives and scope of rehabilitation practice. This brief training is presented to new nurses within weeks of their arrival at the Puvirnituk hospital.

Using culturally safe assessment tools

Challenge

To our knowledge, there are no rehabilitation assessment tools that have been developed and validated specifically for Inuit populations. Rehabilitation professionals are using assessment tools that have been developed in the south, as is the case for other rehabilitation professionals working in Indigenous settings [11,23]. These tools may contain tasks, language or materials with which Inuit are potentially unfamiliar and culturally distant [38]. This can be particularly problematic in paediatric developmental assessments, as developmental milestone achievement of Indigenous children generally differs from that of other Canadian children [39]. The use of such tools may result in over- or under-recognition of children with developmental challenges [39,40], which compromises the identification of children who would actually benefit from early intervention [39]. This can also be problematic when conducting cognitive assessments with older people. Currently used cognitive assessment tools such as the Mini-Mental State Examination [41] and the Montreal Cognitive Assessment [42] have the potential for cultural, educational and language bias [43]. Consequently, outcomes obtained from such assessments may not reflect the client's true abilities [38] and produce false positives [44], which may have a considerable impact on the further therapeutic process.

Strategies

To address the lack of standardised tools for Inuit population, therapists favour the use of clinical observations to complement standardised assessment tools, a strategy also put forward by other professionals working in cross-cultural contexts [11,23,26]. This contributes to obtaining a more complete picture of a client's performance and to increase the richness and meaning of the outcomes. It should be noted that this can be more difficult for new professionals who do not yet have the experience to know what and how to observe. Furthermore, therapists try to compare the performance of clients to other people of the same age group in the community rather than to North American standards. Additionally, professionals attempt to interpret and nuance the assessment results based

on the clients' previous exposure to certain activities prior to the assessment. The data collected during the assessment are therefore triangulated with information reported by the client's entourage (e.g. family members, friends, teachers, etc.) to ensure it was accurately interpreted, a strategy also put forward by other professionals working in a similar context [23]. Ultimately, developing culturally and contextually grounded assessment tools will allow more consistent and accurate assessment to take place. Unfortunately, to our knowledge, there are no groups working with local community teams to adapt rehabilitation assessment tools to the context of Nunavimmiut at the moment. The use of assessment tools such as the Canadian Indigenous Cognitive Assessment (CICA) developed by Jacklin et al. in 2020 [43] could however be considered in the meantime.

Minimising the impact of staff turnover

Challenge

During the first four years following the implementation of the rehabilitation services offer, the four professionals forming the initial rehabilitation team all left their full-time positions. They were replaced by new professionals with no experience of working in an Indigenous environment. Rapid staff turnover is a well-known phenomenon within the health and social services systems in northern regions [18,21,22]. This phenomenon leads to a certain loss of clinical and cultural know-how within the rehabilitation team. With little knowledge of the cultural and social context of Nunavik, newcomer therapist learn these elements by trial and error, making many inadvertent mistakes along the way [22]. These mistakes, some of which are described as microaggressions in the literature, can sometimes inflict insult or injury, be perceived as racist by the host community, and lead to breakdowns in trust [22,45].

Strategies

Rehabilitation professionals favour a longer overlap period in the transition between the arriving and the departing professionals as a way to transfer some of the knowledge and know-how developed within the rehabilitation team. The professionals try to maintain a relationship with the former members of the rehabilitation team in order to continue to benefit from their support, experience and knowledge following their departure. Finally, the creation of computerised files (e.g. assessment charts, clinical tools, administrative procedures) was carried out as a way to keep a trace of the tools created, to avoid redoing the same work

twice, to facilitate the integration of new employees, and to ensure better continuity between past and current services.

Serving a large geographic area

Challenge

Since the rehabilitation team serves all seven villages on the Hudson Bay coast, the presence of rehabilitation professionals in each of these communities is inconsistent. In addition, the villages are spread out along over 800 kilometres of coast and are not connected by road, although regular air service is available. These challenges, well documented in the literature [10,11,21,23], can have an impact on both professionals and clients. For professionals, the organisation and coordination associated with these trips, the time spent in transport and the frequent flight delays or cancellations due to bad weather can be demanding. It should be noted that since COVID-19, visits by rehabilitation professionals to the communities have been less frequent, partly because of the even greater difficulties in terms of the availability of accommodation and premises. For clients, the inconsistent presence of rehabilitation professionals in their community can significantly affect the intensity and continuity of treatment and, ultimately, the quality of services. For example, when a client's condition changes some time after a rehabilitation professional has left, the client must wait until the next visit to receive an update in his treatment programme. However, the lack of regular follow-up can have an impact on the client's motivation and can lead to low client compliance and interest with therapy [10]. Furthermore, it may require increased support from other professionals of the community in a context where resources and services are already limited [21]. Finally, for clients who need to travel to Puvirnituk or Montreal to access emergency or specialised care, stays outside their community can be demanding and stressful [11,18,21].

Strategies

In order to overcome the issues of geographical spread and the inconsistent presence of professionals in the communities, therapists regularly use videoconferencing, a strategy also put forward by rehabilitation teams working in similar contexts [8,23]. Videoconferencing makes it possible to monitor the progress of clients' conditions and to provide remote support between visits by professionals in the communities. It also helps reduce the need for clients to travel to the Puvirnituk hospital or to Montreal for a follow-up on their condition. It should be noted that this strategy

has been used even more since the advent of COVID-19 because of the difficulties of visiting the communities. In addition, rehabilitation professionals try to optimise interprofessional collaboration to maximise the support offered to the client despite the inconsistent presence of rehabilitation team members in the communities. Another interesting strategy described in the literature to improve access to health services in remote and underserved villages is the training of local residents to collaborate in the provision of care [10,11,23,46]. In Alaska, the Alaska's Community Health Aide Program (CHAP) trains community health aides that collaborate in the provision of emergency, acute, chronic, and preventive health care for all ages in remote Alaskan communities [46]. The access to the health care system that they provide has substantially contributed to improving numerous health status indicators among the Alaska Native population [46]. In Nunavut, the rehabilitation team trained community rehabilitation assistants in each community to perform certain therapeutic tasks, including supervision of individual treatment programmes [10,11,23]. Even though this strategy has been described as very effective, difficulties in training and staff retention have been reported [23]. In Nunavik, although a community rehabilitation assistant programme has not yet been developed at the moment, more and more programmes are training local people to act as community workers. This is the case for the *Tasiurtigiit* and *Ilagiilluta* programmes, adaptations to the context and culture of Nunavik of the Acting Early programme and the Integrated Services in Perinatal and Early Childhood (SIPPE) of the Ministère de la Santé et des Services sociaux (MSSS) of Quebec [47].

Discussion

This article aimed to reflect on the experience of an occupational and physical therapy programme development on the Hudson Bay coast of Nunavik. More specifically, the challenges encountered during the first four years following the implementation of the occupational therapy and physiotherapy services and the strategies put in place to overcome them were identified and divided into 10 major themes, examined in the light of the literature and explored with the members of the rehabilitation team. This exercise helped to better understand and circumscribe the challenges faced by the rehabilitation team. It also allowed for further reflection and the search for solutions beyond the strategies implemented to date. Five main lessons emerged from this exercise.

Firstly, the acquisition of knowledge about the characteristic, needs and historical, social, and cultural

realities underlying relationships between professionals and Nunavimmiut is essential in order to improve the quality and relevance of rehabilitation services offered in Nunavik. In this regard, Fraser et al. [25] report that understanding the historical context is an important entry point for service providers to recognise the importance of culture, language, identity and place in service provision and in building relationships with Inuit clients and communities. In addition, the acquisition of cross-cultural interaction knowledge is also critical to foster safe and effective care. That said, it is important that the acquisition of population-specific and cross-cultural interaction knowledge be done in parallel with the acquisition of clinical knowledge, rather than sequentially. In order to support the acquisition of this knowledge, better access to education and cultural training is needed, as noted and recommended by several authors and government reports [2,21,22,25,26,36,48]. Health and social service organisations have a great responsibility in this respect. Support and training opportunities should be offered to health professionals on an ongoing basis – an investment that goes well beyond brief pre-departure training course available. In addition, it is necessary to promote greater access to and use of scientific literature in the workplace. It is also essential to improve knowledge sharing between researchers and health professional and to promote intersectoral collaboration [7,12].

Secondly, in order to improve health and reduce ethnic health disparities, it is essential that the professionals get involved in cultural safety activities that extend beyond the acquisition of population-specific and cross-cultural interaction knowledge and that acknowledge and address biases and stereotypes [13]. Adopting a deep self-reflexive practice is essential to archive this [9,13,26,32,33]. As Byrne et al. [32] mentioned, it may be necessary to unlearn, challenge and question Western ways of knowing and being. The use of the Two-Eyed Seeing approach, developed by Mi'kmaq Elders Albert and Murdena Marshall, is an appropriate starting point to build bridges between Western and Indigenous knowledge [49]. This approach encourages professionals to make a conscious effort "learning to see from one eye with the strengths of Indigenous knowledges and ways of knowing, and from the other eye with the strengths of Western knowledges and ways of knowing, and to using both these eyes together" [49]. Beyond a general appreciation for the diversity of knowledge systems in indigenous and non-indigenous worlds, the specific cultural context, models and meanings of health held by Inuit

should be the focus of training and may serve to better organise services provision.

Thirdly, the optimisation of rehabilitation services in Nunavik inevitably requires collaboration with Inuit community stakeholders. Such collaboration promotes a better alignment of the worldviews and values of rehabilitation professionals and those of the Inuit. Beyond the benefits in terms of achieving therapeutic objectives, such collaboration can contribute to strengthening the capacity of Inuit communities in terms of health and social services, which is one of the recommendations of the Parnasimautik report [6]. It is recognised that non-Inuit workers can greatly assist Inuit communities in their transition towards self-determination and self-governance of services, as long as the practices and approaches respect Inuit's knowledge and expertise [25]. The recruitment and training of community rehabilitation assistants in each of the communities would then be relevant. On the one hand, this would make possible the achievement of therapeutic objectives in the absence of the therapists [10,11,23]. On the other hand, this would contribute to capacity building and the transition to self-determination of Inuit communities with respect to rehabilitation. However, strategies to overcome training and staff retention problems should be put in place to counter the difficulties reported at this level [23].

Fourthly, it is necessary to take the time to develop relationships with Inuit clients and communities. As Byrne et al. [32] note, it is important for professionals to find their place within their host community rather than living and working alongside it. Becoming more involved in community life through participation in community activities as well as in traditional activities may be a promising strategy for increasing cultural awareness [26] and fostering trust and positive relationships [25,36]. In a context where professionals have often learned to maintain a professional distance with their clients, participation in such activities may encourage professionals to establish more friendly and informal relationships with community members [36]. However, as participation in these activities can be perceived both positively and negatively by the host community [25], it is important to exercise judgement and sensitivity.

Finally, teamwork is essential to overcoming the many challenges of providing rehabilitation services in a cross-cultural Inuit context. Collaboration between southern and northern professionals can help to improve the quality, cultural relevance and continuity of services offered to Inuit clients in their episodes of care [21,24]. Collaboration between the various professionals and stakeholders in Nunavik communities can

maximise the support offered to clients despite the inconsistent presence of rehabilitation therapists in the communities and staff turnover. This can also help to reduce the professional isolation present in remote areas by creating opportunities to share challenges and inspiring solutions [21].

Limits

A limitation of this article is that it presents the point of view of four non-Indigenous rehabilitation professionals and that the perspective of Inuit clients was not collected. It should be noted that the co-authors of this article are also non-Indigenous. The challenges experienced and the strategies put forward in this article are therefore those of people trained in a southern cultural and social milieu. The degree of cultural safety of the services offered cannot be defined by the care providers, but by the client or patient receiving the care [50]. It would therefore be essential for future research to address the perspectives of Inuit clients and communities about the services they receive. In addition, this article focused on the experience of developing a rehabilitation programme in a single setting. A similar exercise carried in other Inuit and First Nations contexts by other rehabilitation professionals may yield different results. Furthermore, it is possible that articles addressing rehabilitation in Inuit or, more broadly, in Indigenous contexts were omitted. In addition, the vast majority of the articles used dealt with rehabilitation in a cross-cultural context or with the provision of health services in Inuit communities, while only two articles dealt specifically with rehabilitation in an Inuit context. This raises the relevance of conducting research on the provision of rehabilitation service in Inuit settings specifically. Finally, no evaluation plan for the implementation of the new strategies mentioned in this paper has been carried out at the moment. It would then be relevant to undertake such an evaluation in the near future to promote changes on the ground.

Conclusion

This article highlights the need to adapt clinical rehabilitation practices to Inuit worldviews and culture to improve the quality and relevance of services offered in Nunavik. To achieve this, it is essential to acquire knowledge about cross-cultural interaction and the characteristics, needs and realities of Nunavimmiut. Improving access to specific training for health professionals working in the North, as well as support following their arrival, is therefore necessary. In addition, in

order to provide culturally safe care, as defined by clients and their communities, it is necessary for professionals to demonstrate critical self-reflection regarding their practice. Moreover, optimising partnerships with community stakeholders and developing relations with clients and Inuit communities are also critical. Finally, teamwork is essential to overcome the many challenges of providing rehabilitation services in an Inuit cross-cultural context. The lessons learned from this process may be relevant to health professionals working in a variety of Indigenous contexts.

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