THESIS

# OCCUPATIONAL THERAPISTS:

# THE QUARTERBACKS OF PELVIC HEALTHCARE

Submitted by

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# ABSTRACT

## OCCUPATIONAL THERAPISTS:

## THE QUARTERBACKS OF PELVIC HEALTHCARE

Background: The ability to effectively manage chronic issues has a large impact on a person's quality of life. Pelvic floor dysfunction (PFD) is a chronic and debilitating disorder which affects millions of people worldwide. PFD is often placed lower in the hierarchy of treatable medical conditions yet has a substantial impact on a person's functional capability. Pelvic health occupational therapists (PHOT)s are emerging practitioners in PFD management. PHOTs provide a client-centred, holistic approach to care. To date PHOT is not well described in the literature or well known in the practice of pelvic healthcare.

Aim: To investigate the perceptions of PHOTs, their value in the management of PFD, and how this value is communicated to other healthcare providers (OHCP)s.

Methods: This qualitative research study included a demographic survey and one-to-one interviews with PHOTs and lead researchers. Thirteen PHOTs were interviewed by a lead researcher and provided data on their perceptions and interactions with OHCPs. Data collection was completed over a five-month period from July 2022-December 2022. Data collection ended once saturation in responses was reached. Data were analyzed by lead researchers using an in vivo coding process, creation of categories and code book. I created themes and sub-themes driven by the data.

Results: Two main themes were created from the data with PHOT participants supporting inclusion of OT in pelvic healthcare; (1) pelvic healthcare is an interdisciplinary field; (2) more practitioners are needed in PHOT.

Conclusion: PHOTs perceptions and value on interdisciplinary teams are key to increased communication between PHOTs, OHCPs, and the clients they serve. Further research is needed to define the PHOT role and impact as part of an interdisciplinary team.

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# CHAPTER 1: INTRODUCTION, LITERATURE REVIEW, METHODS

## *Introduction*

Primarily referred to in the literature as pelvic floor physical therapy (PFPT), pelvic floor rehabilitative treatment can also be provided within the occupational therapy (OT) scope of practice. Occupational therapists provide a holistic, patient centred perspective, when working with patients suffering from pelvic floor disorders. Certified pelvic health OTs (PHOT) can address multiple causes and limiting factors of pelvic floor dysfunction and pelvic healthcare.

## *Overview Of The Pelvic Floor*

The pelvic floor is made up of multiple muscles that support the abdominopelvic cavity and the organs therein. The external anal sphincter, perineal body and transverse perineal muscles are generally categorized as the "superficial" pelvic floor muscles. Deep pelvic floor muscles consist of the pubococcygeus, iliococcygeus, coccygeus, and puborectalis muscles (Raizada & Mittal, 2008).

Till and colleagues (2019) list the general purpose of the pelvic floor to support the abdominopelvic organs, control the release of urine, menstruation/ childbirth, and feces. This is accomplished by the muscles working unison with the diaphragm and abdominal wall to facilitate intraabdominal pressure (IAP) and core stability. Due to the multiple demands and tasks that are required, pelvic floor dysfunction (PFD) is common among many people. Female identifying people or people with the capacity to give birth are particularly affected by PFD (Till et al., 2019).

## *Pelvic Floor Dysfunction and Diagnoses*

Pelvic floor dysfunction (PFD) is the umbrella term under which many differential diagnoses are housed such as urinary incontinence, chronic pelvic pain, and pelvic organ prolapse. The

diagnosing practitioner's job is to discern the diagnosis, degree, and impact PFD has on patients and their quality of life. The practitioner must have knowledge and understanding of different treatment options available to provide best, evidence-based care to patients (Burkhart et al., 2021).

In its most simple form, urinary incontinence is the dysfunction of the muscles surrounding the urethra, bladder, and occasionally ureters. This muscular dysfunction can inhibit the ability to retain or release urine at the desired time. Buckley and Lapitan (2010) found very little evidence for urinary incontinence prevalence and incidence in the general population. The authors postulate this is due to symptoms being hard to quantify and the reliance of patient report and understanding of their symptoms (Buckley & Lapitan, 2010).

A systematic review performed by (Mostafaei et al., 2020), demonstrated the variability in stress urinary incontinence. The highest prevalence reported affects 58%- 84% of the elderly population in Britain. Mostafaei and colleagues found that much of the irregularity of reporting was due to the lack of a urinary incontinence assessment tools and a gold-standard definition of urinary incontinence. Bharucha and colleagues (2022) noted that fecal incontinence was demonstrated to be a less prevalent diagnosis and less frequently reported than urinary incontinence. Fecal incontinence symptoms arise from anal sphincter, rectum, bowel, or gastrointestinal dysfunction and the patient's inability to retain bowel contents (Bharucha et al., 2022)

Pelvic organ prolapse is another pelvic floor disorder that is more prevalent in postpartum women (Saunders, 2017). Prolapse occurs when a pelvic organ distends into the walls of the vagina. Cystocele (bladder prolapse), rectocele (rectal prolapse), enterocele (The small intestine), and uterine prolapse are the most common forms. The degree and severity of the condition are measured by how far down the vaginal canal the intruding organ descends (Basu, 2020).

*Chronic Pelvic Pain*

Chronic pelvic pain is another term used by practitioners and patients for pelvic floor dysfunctions that are accompanied by pain. Dyspareunia is a diagnosis used to categorize consistent and chronic pain in the vagina, perineum, and lower abdomen during sexual intercourse (Burkhart et al., 2021). Vaginismus is a condition of involuntary pelvic muscular spasm which can cause extreme pain and discomfort. Crowley and colleagues (2009) discussed vaginismus as a "clinical syndrome" rather than a diagnosis. The authors described the syndrome as a multi-layered response to sexual activity that is influenced by psychological, contextual, and somatic factors (Crowley et al., 2009).

Another sexual pain syndrome prevalent in the literature is vulvodynia. Described as chronic pain around the vulva with no apparent cause, Ponte and colleagues (2009) noted that vulvodynia substantially affected quality of life and daily occupational participation.

*Impact of pelvic floor dysfunction on quality of life*

According to Basu (2020), chronic pain, dysfunction, and lack of communication from OHCPs, severely impacted patients' quality of life and occupational participation regardless of its physical location. Swithinbank and colleagues (1999), found that PFD and comorbid chronic pain to have a detrimental impact on women's quality of life. Easy access to toilets, avoidance of social interactions, and participation in exercise are cited as prominent limitations on quality of life (Swithinbank & Abrams, 1999).

In 2009, a team of medical doctors conducted a study of women with vulvodynia (chronic vulvar pain). Their findings showed vulvodynia and its symptoms to have a clinically significant impact in areas of work and hobbies, and interference with sex life (Ponte et al., 2009). The implications on these areas of connection, work, leisure, and sexual functioning demonstrated a broad impact on the patient's quality of life (Ponte et al., 2009).

*Current treatment options*

A 2019 review article listed traditional functional treatments for PFD as rehabilitative therapies (such as manual or exercise therapy), mindfulness, biofeedback, pharmacology, and surgery (Hong & Ding, 2019). Hong and Ding (2019), noted that the severity, diagnosis, presentation, and treating practitioner had a large impact on the approach to patient care and collaboration.

*Rehabilitative therapies*

Manual and rehabilitative therapies for pelvic floor health and PFD have traditionally been approached by the physical therapy profession in the literature. Twiddy and colleagues (2015), found that physical therapists addressed movement, pain management, and symptom management within a pelvic health interdisciplinary team. PTs also addressed pelvic floor exercises and alternative postural adaptations. OTs skills and impact for PFD, focused on functioning in daily life, understanding meaningful target areas, and goals for reducing PFD symptoms (Twiddy et al., 2015).

Biofeedback is the process of using surface electromyography (sEMG) to demonstrate the use and voluntary recruitment of muscles to pelvic health patients. This technique assists the down training and regulation of muscular recruitment mitigating symptoms of PFD (Kaufman et al., 2021). Rehabilitative treatment or pelvic floor therapy is described as a less invasive approach to address pelvic floor dysfunctions. Till and colleagues (2019), describe rehabilitative therapies as the first line treatment of PFD and is usually prescribed by primary care physicians.

*Pharmacology*

Medications are also prescribed in the management of PFD. Mirabegron (used to mitigate overactive bladder via relaxation of bladder muscles preventing uncontrolled urination) and Antimuscarinics block the early release of muscular contraction acetylcholine- preventing

premature urination. Nonsteroidal anti-inflammatory drugs (NSAIDs) are also used to decrease inflammation of tissues surrounding the bladder (Hong & Ding, 2019). Basu (2020) also noted that topical estrogen is a widely used option in primary care for the treatment of vaginal dryness, pain, and pelvic muscle atrophy. Topical estrogen had also been shown to reduce recurrent urinary tract infections (Basu, 2020).

*Surgery*

Surgical options are usually offered as a last resort for more severe cases of PFD. Urogynaecologists can specialize in the fitting of pessaries and other supportive aids to provide internal stability for patients with severe pelvic organ prolapse (Basu, 2020). Hong and Ding (2019) discussed that in the event of failure to mitigate symptoms of PFD with more conservative therapies, surgery may be recommended with transvaginal mesh. The mesh assumes the role of abdominopelvic support that would normally be provided by the pelvic floor. There have been debates in the medical community for best approach and attachment sites for the mesh (Hong & Ding, 2019).

*Pelvic Floor Rehabilitation and Occupational Therapy*

As mentioned by Twiddy and colleagues (2015), occupational therapy may be used in the treatment and rehabilitation of PFD. Occupational therapy addresses the enrichment or acquisition of skills for participation in desired roles and activities throughout the lifespan. Occupational therapy practitioners provide a multifaceted, holistic approach to enable all patients to reach their desired level of interaction with occupations with as much independence as possible ("Occupational Therapy Practice Framework," 2020).

OTs may work in a variety of settings to serve the needs of their community, from inpatient acute care to community or mental health-based practice. Other healthcare providers (OHCPs),

continue to struggle with their awareness and knowledge of OT, and how they can collaborate to improve patients' outcomes (Alotaibi et al., 2015).

*OHCPs awareness and knowledge of OT*

Although OT is one of the oldest rehabilitative practices in the United States (Kielhofner, 2009). A study by Jamnadas and colleagues (2002) demonstrated a lack of understanding by healthcare students and OHCPs in OTs "role and services within healthcare." When healthcare students demonstrated knowledge of OT, it was typically categorized into "fine motor", "rehabilitation", or "activities of daily living" (Jamnadas et al., 2002). This limitation of understanding and awareness of OT is a disservice to OHCPs and their patients. OTs who work in interdisciplinary teams and emerging practice areas, such as pelvic healthcare, are similarly affected.

Alotaibi and colleagues (2015), generated a publication from a cross-sectional descriptive study. Participants of the study were health science students and faculty at a Kuwait university. The study's purpose was to investigate student awareness of OT via a convenience sample of students in medicine and allied health professions (Alotaibi et al., 2015).

Alotaibi and colleagues (2015), found that medical students did not demonstrate a clinically significant rate of awareness of occupational therapy. However, the allied health department had the highest clinically significant rate of awareness and understanding of OT. The demonstrated level of awareness of OT within the medical community supports the notion to increase interprofessional communication and awareness of disciplines' roles on patient care teams.

*An occupational approach to PFD*

OTs addressing pelvic health not only address the biomechanical, or muscular dysfunctions, but habits, routines, and roles that contribute to PFD. By incorporating contextual and patient-centered factors to meet the patient's specific needs and goals. Much of the education and

approach to intervention used by OTs stem from "create/promote, establish/restore, maintain, modify, and prevent" (“Occupational Therapy Practice Framework,” 2020). Alotaibi and colleagues (2015), also found that interprofessional education was key for increasing knowledge and awareness of occupational therapy's role in a treatment team rather than being viewed as "another branch of physical therapy" (p.5).

*Multidisciplinary Literature Gap*

At this time, OTs value in pelvic healthcare is not well understood or explored by OHCPs or the public. OTs themselves have been remiss on increasing the body of knowledge with which to educate others about the specialty of PHOT. The goal of this research is to understand from the PHOT perspective, where communication with OHCPs can be improved and what the PHOT specific value is on an interdisciplinary team.

*Research Question*

From the PHOT perspective, what do OHCPs understand about PHOTs value and how can we improve collaborative communication?

# METHODS

## *Purpose Statement*

The purpose of this study is to 1) explore PHOTs perceptions of OHCPs and their understanding and value of PHOTs on interdisciplinary teams, (2) explore PHOTs communication and collaboration with OHCPs.

## *Study Design*

This research study was a qualitative descriptive design using an online survey to engage participants and screen for inclusion criteria (Colorafi & Evans, 2006). A semi-structured, one-to-one interview explored the perceptions of PHOTs in their relationships, collaboration with OHCPs, and the patients they serve in pelvic health. This study increased our knowledge of OHCPs understanding of PHOT, and how PHOTs bridge the gap through communication and collaboration on care teams.

## *Positioning Statement*

As primary researcher in this study, I am interested in the emerging practice area of PHOT and its application within the healthcare system. Given the holistic nature and focus on patient-centered care of OT, I assume that pelvic healthcare through an OT lens will also become a more holistic practice. My co-authors and I mitigated our biases through positioning statements, member checking, and peer coding of transcripts.

## *Recruitment and Participants*

Participants were recruited through social media special interest groups and direct emails to OT practitioners working in pelvic health. This purposive sample consisted of approved flyers links to our online data collection survey. Snowball sampling (Creswell & Poth, 2018) was also used via participant sharing of the survey with other PHOTs. This study was approved through

the University Institutional Review Board (IRB) and participants provided informed consent via the online survey. Upon survey completion, the last survey item asked study participants to complete a qualitative interview. The individual met the following criteria: 1) occupational therapy practitioner, 2) over one year of experience in occupational therapy, and 3) any experience with treating pelvic health patients. Participants who met the criteria were invited to complete a one-to-one video interview with a lead researcher.

*Data Collection and Management*

Data were collected over a five-month period from July 2022 to December 2022. Participants completed the online survey we created and were invited to provide contact information to schedule a follow up 45-minute interview with researchers. All data were stored on a secure server and de-identified prior to use in publication.

*Recruitment Survey*

We created and distributed our online survey through *Qualtrics XM, (The Leading Experience Management Software*). This was designed to engage participants and screen for inclusion criteria for a follow up interview. Survey completion took approximately five minutes and data collected were de-identified and stored on the university secure server.

The survey included 12 questions (Appendix A) to gain information such as level of education, practice areas, practice setting, OT years of experience, and pelvic health experience. Prior to submission to the IRB, the survey was completed by one external participant and the lead researchers. External feedback was analyzed and used to refine questions for clarity and flow of questions. Changes were made and the survey questions were finalized and submitted to the IRB for approval.

*Interviews*

Participants consented to be contacted by a researcher and scheduled for a 45-minute interview. Interviews were conducted via video on a secure platform and all interviews were recorded and transcribed verbatim using online programs. Data were then downloaded and stored on the university secure server. Interview questions were developed and edited by JHF, ELF, and AAS (Table 1). We refined our questions through practice and testing with peers for clarity and open-endedness. In total, eight main questions and nine follow up questions or probes were finalized to encourage thoughtful answers and rich descriptions in participant data.

We developed our interview questions to answer our research question "From the PHOT perspective, what do OHCPs understand about PHOTs value and how can we improve collaborative communication?"

Interviews were conducted until saturation was reached as demonstrated by similar or repeated answers from study participants. Data analysis was then initiated (Creswell & Poth, 2018).

*Data Analysis*

*Recruitment Survey*

We downloaded our data from Qualtrics into an excel spreadsheet which was then stored on the secure server. Descriptive statistics were used to analyze and describe the sample and demonstrate common practice settings and years of participant experience as a PHOT.

*Interviews*

Interview data were transcribed verbatim using an online transcription software and we then checked for errors against the audio recording. Transcripts were then uploaded into *Dedoose* (2021) management software for analysis and data management. We initiated our data analysis using in vivo coding to create common codes and categories present in the data (Creswell &

Poth, 2018). We then created a codebook that streamlined and linked codes into categories, key themes, and sub-themes. We completed member checking of key themes via email and no new ideas or challenges to themes were presented in 12 of the 13 participants' feedback.

# CHAPTER 2: MANUSCRIPT

## *Introduction*

Pelvic health and pelvic floor dysfunction (PFD) remain one of the lowest areas of patient health literacy according to a 2019 systematic review (Fante et al., 2019). Women's knowledge of their pelvic floor, pelvic anatomy, and when to seek medical care are highly correlated with level of education and income status. Only 47.5% of respondents to a 2017 study reported that they learned about their pelvic healthcare from their healthcare provider (Reid et al., 2017). Given this reported low level of communication with healthcare providers around pelvic health, many women may be reluctant to bring up issues of PFD to their care providers (Tso et al., 2018).

PFD is the umbrella term under which many differential diagnoses are housed such as pelvic organ prolapse, urinary incontinence, and chronic pelvic pain. Hong and Ding (2019) listed traditional treatments for pelvic floor dysfunction as manual therapy, pharmacology, surgery, pessary use and psychology. The severity, diagnosis, presentation and treating practitioner have a large impact on the approach to treatment and collaboration with the patient (Hong & Ding, 2019).

## *Non-surgical approaches to PFD management*

Non-surgical approaches to PFD rely upon interdisciplinary collaboration between rehabilitative therapy providers, prescribing providers, and the patients themselves to ensure positive outcomes (Twiddy et al., 2015). Twiddy and colleagues (2015) noted that physical

therapists are the practitioners within an interdisciplinary team who address movement, pain management, and pelvic floor exercises. Twiddy and colleagues (2015), also discussed the role of OT within a pelvic health interdisciplinary team. They noted that OTs value centered on the roles of mindfulness, nervous system regulation, and daily life functioning.

Pelvic health occupational therapists (PHOTs), not only provide a focus on biomechanical and muscular dysfunctions present in PFD. They also incorporate environmental, biological, and social factors to meet patients' specific needs and goals. According to Burkhart and colleagues (2020), the specific approach to intervention by PHOTs stems from the OT practice framework, and involves core OT principles of "create/promote, establish/restore, maintain, modify, and prevent" (“Occupational Therapy Practice Framework,” 2020).

A study conducted in the United States found that nursing and physician assistant students did not have adequate knowledge of occupational therapy and its "role and services within healthcare" (Jamnadas et al., 2002). This lack of knowledge places a barrier to accessing valuable services for patients who struggle with chronic conditions, such as PFD. To enable access to OT, an increase in interprofessional awareness between OT and other healthcare providers (OHCPs) is needed.

*Purpose statement*

The purpose of this study is to 1) explore PHOTs perceptions of OHCPs and their understanding and value of PHOTs on interdisciplinary teams, (2) explore PHOTs communication and collaboration with OHCPs.

# METHODS

## *Design*

A qualitative descriptive study design was used to elicit rich descriptions within the data. Our study included an online survey and a one-to-one semi-structured interview with PHOTs.

## *Recruitment and participants*

Participants were recruited via a convenience sample through social media special interest groups and direct emails to PHOTs. Participants were included in the study if they practiced as an OT in pelvic health for more than one year. Participants were excluded from the study if they did not identify as an OT practitioner (i.e., OT or OT assistant), if they had less than one year experience in PHOT, or if they did not speak English.

## *Data Collection*

### *Recruiting Participants Using a Survey*

We initiated our research via a short survey we created and facilitated in the online survey program Qualtrics (*Qualtrics XM // The Leading Experience Management Software*, n.d.). The survey engaged participants and determined eligibility for a one-to-one interview with the first or second author. We created and tested the survey, then a peer who was external to the study, completed the survey to ensure clarity and flow of questions and provide external feedback. After we analyzed the external feedback, we fine-tuned the survey questions to flow more succinctly from one to the next.

We created the survey to ascertain the practitioner's number of years in pelvic health, setting, and appropriateness for inclusion in our study. We opened the survey in July 2022 and completed purposive sampling of known PHOTs through social media and direct emails. We closed our

survey to additional participants in December 2022. Table 2 displays demographic data and is representative of participants who completed both survey and interview process.

*Interviews*

We developed our semi-structured interviews questions (see Appendix B), to initiate the conversation around PHOTs unique perceptions of patient pelvic health care experiences and interactions with non-OT practitioners. We conducted a one-to-one interview with each study participant using a secure video platform. Each interview lasted approximately 45 minutes and video and audio were recorded. Thirteen PHOTs were interviewed to reach data saturation, where no new information was presented in participant answers. The recruitment and interview process was then terminated (Creswell & Poth, 2018). Pseudonyms were used for data presented in Table 1.

*Data Analysis*

*Participants*

The participant sample was collected and described in Table 1. The table demonstrates key demographic data which allowed us to link qualitative findings to specific participants, thus contextualizing quotes from our one-to-one interviews (see Table 1).

*Interviews*

Interviews were transcribed verbatim, de-identified, and uploaded into *Dedoose* (2021) for analysis. Software used assisted in the coding and analysis process by tracking codes and categories assigned to specific quotes. We initiated the process of in vivo coding to form our initial codes book. We then organized the codes into categories using a biopsychosocial lens to ensure the holistic, and OT based nature of participant responses. We then used the data to create sub-themes and themes that aligned with our research question. Participant quotes were used to support theme creation and are represented in our results using pseudonyms.

We then performed member checking by emailing all of our participants the themes we created from the data. No new ideas or challenges to our themes were presented by 12 of the 13 participants.

*Positionality statement*

As an OT student who wishes to practice in pelvic healthcare, I have a vested interest in increasing awareness and value of PHOT on interdisciplinary teams. Prior experience in medical offices drew my focus to the lack of OHCP awareness of OT's skills and value within pelvic healthcare.

# RESULTS

*Participant Sample*

Thirteen occupational therapists completed the study (Table 1). Over 50% of the participants (n = 7) had been practicing in pelvic health for more than 5 years and 77% (n=10) report outpatient as their primary practice setting (Table 1).

*Table 1. Demographic information*

| Pseudonym | Setting | Years in PHOT | Years in OT |
|---|---|---|---|
| Maureen | Acute | Less than 5 | 2-5 |
| Rose | Acute/Outpatient | Less than 5 | 6-10 |
| Thea | Outpatient | Less than 5 | 6-10 |
| Savannah | Outpatient | Less than 5 | 11-15 |
| Annie | Outpatient | Less than 5 | 16-20 |
| Sally | Outpatient | Less than 5 | 16-20 |
| Keira | Outpatient | 6-10 | 11-15 |
| Helen | Outpatient | 6-10 | 11-15 |
| Kendra | Outpatient | 6-10 | 6-10 |
| Roger | Outpatient | 11-15 | 21-25 |
| Keely | Outpatient/Home Health | 6-10 | 26+ |
| Hope | Home Health | Less than 5 | 11-15 |
| June | Community | 6-10 | 16-20 |

*Interviews*

We created two key themes from the data (see Table 2): (1) pelvic healthcare is an interdisciplinary field, and (2) more practitioners are needed in PHOT. Exemplary quotes are included for each theme and sub-theme.

*Table 2. Thematic Analysis*

| Codes | Categories | Sub-Themes | Key Theme |
|---|---|---|---|
| Other providers' approach to PH,<br>Referrals,<br>Client awareness,<br>Perception of other providers,<br>Networking with other providers. | Other providers<br>OT approach | Patient centred care is vital to positive outcomes.<br>Pelvic healthcare is not a one and done practice. | Pelvic healthcare is an interdisciplinary field. |
| Client symptoms,<br>Client experience with other providers,<br>Interdisciplinary,<br>Client awareness,<br>Other providers' support of PHOT. | Client experiences<br>OT approach<br>OT process | Pelvic health can be addressed in all settings.<br>Increased public awareness about pelvic health | More practitioners are needed in pelvic health. |

## KEY THEME: PELVIC HEALTHCARE IS AN INTERDISCIPLINARY FIELD

Given that pelvic floor disorder and pelvic healthcare affect many different populations and conditions, an interdisciplinary approach is needed to provide the highest quality of care to pelvic health patients. PHOTs in our study noted that point of care providers such as pain specialists, obstetric/gynecological providers, and urologists are key in recognizing symptoms and need of pelvic rehabilitation for patients. Currently, patient reports and experience with PHOTs are some of the strongest supports for professional relationship building external to interdisciplinary teams. This was articulated best by Savannah who said:

> The pain specialized doctors have started referring to me. I know them from patients I've gotten from them. I feel comfortable sending patients to them. I've met them just to grab lunch with a few of the doctors here. Sometimes it's a slow process of literally being a nice human being and checking in on providers and asking basic things to build a relationship.

Thea was particularly insightful with her responses as to how and why PHOTs belong on interdisciplinary care teams for pelvic healthcare:

> I heard it several years ago is that OTs are great quarterbacks of care because we can really think about things holistically and think about all the things that might be contributing to somebody's barriers. That makes us great in referring out when need be or touching base with the team to say 'hey, can we incorporate this or that or the other thing?' I actually think our scope makes us a good quarterback for all disciplines.

Thea also recognized the power of relationship building within care teams as heavily impacted by patient reports and feedback rather than evidence in the literature:

There's a lot of relationship building and ultimately you know some people will be like, 'leave the evidence at home nobody has time for that.' They just want to know 'How are you going to help my patient?' And if they are hearing enough symptoms to say 'Oh yeah, I have a resource for you that will work.'

Thea's observation, that relationships created with OHCPs are impacted by patient success rate and feedback, was also reiterated by Helen:

> I've got one referral source who is very eager to send me clients. He was willing to take that 'risk.' But, if his clients weren't coming back and giving positive reports, I don't know if that that referral stream would have continued. You have to deliver. If you do, then people keep coming.

Keira ultimately discussed that the field of pelvic healthcare is a broad practice area allowing for many opportunities to collaborate and provide holistic care to pelvic health patients:

> I think there's, there's room for everyone at the table. I think in a perfect world, in a pelvic health clinic, there would be OTS, PTS, dieticians, nurse practitioners, PAs, Urogyns, everyone under the sun, because when you get all these people who are so good at what they do, and who really want to help their patients, then patients get better faster. And they don't have to suffer...Everyone has an essential role in helping these patients in pelvic health.

*Patient centred care is vital to positive outcomes.*

Use of a patient centred focus in pelvic healthcare (care is tailored to the specific patient rather than the presented condition), is vital to a well-functioning interdisciplinary team. PHOTs in our study described tailoring their care to what the patient wanted or needed, versus their specific diagnosis. Sally discussed the importance of taking a patient centered approach from the very first visit and evaluation:

> If somebody has urinary incontinence, do I think they should address it? Of course, I do. But if it doesn't bother them and it doesn't impact their life and they say 'I don't really honestly care'. I've had patients like this, 'I don't care that I have urinary leakage. I have all this pain.' To be able to really pick out their goals and that's what's going to drive whatever approach I take. I really try to be very mindful and respectful of what I feel like the client would most benefit from as opposed to being stuck in 'I use manual treatment, or I use biofeedback for everybody, or I use an exercise progression for everybody.'

Savannah also describes the multifactorial influences on patient's experience of PFD:

> I tend to get referrals for people who have [a lot of] layers to what's happening. They might have mental illness coupled with a pelvic floor dysfunction. They might have a trauma history coupled with it. And I think about the people that are my colleagues here will send those [patients] to me because they do know that's the strength of an OT.

*Pelvic healthcare is not a one and done practice.*

No single provider can address all the underlying factors and influences that accompany each PFD experience. Savannah discussed the need to refer to other practitioners and approach patient care with a holistic perspective:

> I do a team approach a lot of the time, I frequently will refer people to sex therapists. I have a dietician that I work with, for a lot of my clients with constipation, IBS type stuff. I'm amazed! There are a couple of amazing postpartum specialized mental health therapists that do trauma-based care...I refer to them a lot. And then doctors too, urogyn, pelvic pain providers etc. I'm constantly working with people with endometriosis. We have an excision specialist here that I send people to. It is always a team approach because when there's lots going on, we need to rule in or out what's happening, and that's stuff we can't do as an OT. I'm finding the people that can.

Helen also described that a patient experiencing pelvic health issues may also experience symptoms in many other areas of their life, "Because when you're hypertonic, constipation, bladder leaking, pain with sex, difficulty connecting intimately to another person, or having a chain of events that ripples into their intimate relationships, where it's just so much more than muscular/ structural stuff."

Given the potential for multiple affected areas of a patient's life and health, one can infer that patients would require a specialized, team approach. Collaboration of patient care and noting the strengths of individual practitioners was a highly present thread in our study with PHOTs.

## KEY THEME: MORE PRACTITIONERS ARE NEEDED IN PELVIC HEALTH

Many of our participants discussed their arrival into pelvic healthcare as one based on a need to be filled within their community. Keira noted that her training in pelvic health was initiated by the hospital she worked in as a new OT:

> The specialty hospital that I was working at, asked me if I wanted to train in the pelvic floor program... OTs were the ones who took the program over from the beginning, because the PTs didn't want to do it.

Sally described a similar experience of having a specific request come from her management team, to train in pelvic healthcare:

> They [the hospital] wanted to start a pelvic health program, and I was initially looking to hire a pelvic floor PT. We had a very hard time hiring and, in my research, I came across a blog post talking about occupational therapy in pelvic health. And I said "oh! we can do this!" I didn't even know. I mentioned it to my management and said, we might want to open this position up to occupational therapists as well, just to widen the field and [increase] the likelihood of being able to hire someone. And they turned around and said, well, you're an OT, would you like to be trained?

Helen discussed the simple, geographic need for more practitioners in pelvic health, especially in rural areas where there are very few providers:

> There's one PT 45 minutes away, who was inundated with these referrals to the point of they've brought a second PT into their practice to take on more because she was booking out three months, there's just not enough of us, right? So, when I moved to town, it was almost like, no questions asked, "You're doing this?!" We [OHCPs] are sending them [pelvic healthcare patients] to you! I didn't have to prove myself.

*Pelvic health can be addressed in all settings.*

Maureen, among many other participants in our study, felt strongly that pelvic healthcare can and should be addressed in all settings by OTs:

> I literally I feel like pelvic floor could be addressed in any setting of OT, maybe not in schools, but like outpatient peds etc. One thing that I think would be so needed is OTs creating a pelvic health program in SNFs/nursing homes. Home health, anything with older adults, I think is a huge need because there is so much like incontinence that adults experience. And that can lead to then falls as in 'I'm just trying to make it to the bathroom', so I think OT could play a huge role in that area!

Helen also had ideas of where PHOT could make a significant impact:

> I would love to see, every labor and delivery unit, have an OT that is doing preparatory, prehab education, with birthing women, women that are getting ready to give birth. We're not talking about just pelvic health; we're talking about a bigger picture of women's health and birthing health.

Kendra had a broader perspective of settings "It's less, 'what's the ideal setting for pelvic health?' But 'are we addressing pelvic health throughout the spectrum of care?' So, there should be pelvic health [OTs] addressing [postpartum patients] when they are leaving the hospital, and there should be pelvic health connection."

*Increased public awareness about pelvic health.*

Study participants also noted a recent shift in the awareness and open discussion of pelvic healthcare. This was particularly evident in younger and potentially more open generations. Helen attributed these shifts in mindset may be happening due to the rise and use of social media:

> There is a progressive mindset of a certain generation that's like, 'Yeah, I knew about pelvic health rehab. Instagram and TikTok taught me, and I am gonna go get me some because I'm not gonna pee my pants like my mom'. They're just on board.

Kendra also reported that more new patients are coming to her with increased knowledge and self-awareness of pelvic health and the impact of PFD on their overall wellbeing:

> I have a much more educated clientele than I did seven years ago. More of my clients are [saying] "I know I need pelvic floor therapy" [or] "My friend was telling me about pelvic floor therapy." It's so much less secret or hidden than seven years ago. They're saying, "my doctor gave me a referral" or "my friend said at CrossFit that I was leaking, so I need to come see you."

The increased awareness and growing population of pelvic health patients also supports the need for more practitioners in pelvic healthcare. The interviews we conducted throughout this study, demonstrate that PHOTs are well equipped to fill the need and role of pelvic health providers.

# DISCUSSION

This study illuminated perspectives of interdisciplinary communication between PHOTs and OHCPs. We uncovered different relationship building strategies of PHOTs within the healthcare system and gained insight for improvements in communication and collaboration with OHCPs. PHOT study participants were interviewed, and we concluded that the key themes were 1) pelvic healthcare is an interdisciplinary field and 2) more practitioners are needed in pelvic health.

According to our study participants, OHCPs are becoming more aware of pelvic health rehabilitation options and increasing their referrals to trusted members of rehabilitation teams. A study on physician perceptions of PFD reported that the healthcare burden for females with PFD is predicted to sharply increase. Wong and colleagues (2019), postulate that by 2050, 43.8 million Americans may suffer from a PFD diagnosis. Data from our study participants also demonstrated that to meet this need, additional pelvic health practitioners must be trained and available in all settings. Given the lack of information for the use of PHOT within pelvic healthcare, we can also conclude that pelvic health occupational therapy is an emerging practice area. Additional research is needed to support PHOT's value and evidence base in the literature.

Currently, there is a lack of scientific literature supporting OT in this field, however, this may be secondary to the emerging nature of the specialty. Over 50% of our study participants reported practicing in pelvic healthcare for < 5 years. Participant response on the importance of their collaboration with OHCPs demonstrates the benefits, and almost vital influence, that interdisciplinary care has on patient outcomes in pelvic healthcare.

Interdisciplinary care has also been discussed as best practice within physical therapy for pelvic pain literature. Vandyken & Hilton (2017), discussed that there is strong evidence for use of the biopsychosocial approach in the care of female pelvic pain. The biopsychosocial model is

also frequently used within OT practice to ensure a "more diversified approach" allows therapists to "address a broader range of factors that may exert significant impacts on client outcomes" (Gentry et al., 2018). Allowing for a more diversified approach also calls into question the use of multi or interdisciplinary care teams. Vandyken & Hilton felt that along with the use of the biopsychosocial model, an interdisciplinary approach was key for best practice in the management of chronic pelvic pain.

When interviewing our study participants and gaining their personal perspectives, we were met with overwhelmingly positive feedback of the therapists' interactions with OHCPs. The solid therapeutic relationships built with those providers, and the ‘warm welcome’ received in the pelvic healthcare field. During our research and study design creation, we assumed that PHOTs were not as we received as other pelvic health rehabilitation professionals. However, our participants reported that OHCPs are seeking additional support in the care of pelvic health patients. Understanding the OT role in pelvic healthcare is increasing the ability of OHCPs to obtain rehabilitation care for their pelvic health patients.

Study participants also reported that their strongest connections to OHCPs are the patients themselves. Our participants discussed that positive patient outcomes and patient reports to referring providers are solidifying the PHOTs role and value with OHCPs. Additionally, it appears that there is an increase in OHCPs' awareness and affability to collaborate with PHOTs. In contrast to our qualitative results, international OT literature is proposing that many providers are still unaware of the scope and efficacy of OT practice in general, and particularly in pelvic healthcare as found by Alotaibi and colleagues (2015), and Wan Yunus and colleagues (2022)

Continuing to establish relationships with OHCPs and integrate the PHOT perspective in pelvic healthcare treatment, may also improve OHCPs awareness of the OT scope of practice and clinical reasoning skills as a profession. Alotaibi and colleagues (2015), echoed a participant's

report that OHCPs prefer to learn about OT by shadowing or collaborating on patient care, rather than via a seminar, educational materials, or an "elevator speech".

In keeping with our study results, Jenkins and colleagues (2023), found that the struggle in interdisciplinary communication may occur with unclear expectations between provider roles and the engagement of patients in care decision making. The impact of a larger, hospital or inpatient context was also found to have a detrimental effect on communication and understanding between healthcare providers across all disciplines. Jenkins and colleagues found that there is no singular solution to improve interdisciplinary communication. The misunderstanding of each discipline's role and contribution may also be applied to the pelvic healthcare and the PHOT context.

As we work in the complex, and interdisciplinary field of pelvic healthcare, we can reflect on the need for a "quarterback of care" as stated by one of our participants. Who is advocating for pelvic health patients and ensuring best practice? OTs may fill this role in pelvic health.

PHOT is an emerging practice area in a variety of settings, including but not limited to hospital or inpatient care, pediatrics, and outpatient clinics. Participants in this study also reported that practicing in the outpatient setting allowed for increased flexibility of approach and populations that may be served. Populations may include pre and postnatal women, postpartum women, pediatric pelvic patients, and post-abdominopelvic surgery patients. In contrast, the Bureau of labor statistics found that 30% of OTs are working in hospital or inpatient settings, and only 11% are working within a freestanding outpatient clinic (*Occupational Therapists*, n.d.). This data supports the need for PHOTs to practice within common OT settings and increase OHCPs understanding and awareness of OTs in pelvic healthcare. Study participants reiterated the need for PHOTs in all settings across the lifespan. Inpatient PHOTs may also collaborate with outpatient or home health PHOTs to ensure continuity of care with their patients.

Pelvic healthcare is increasing in popularity and awareness as noted by participants and their interactions with patients. To address pelvic healthcare at the most basic level, occupational therapists and physical therapists are required to become certified in pelvic floor management. Currently, the gold standard for this certification is through Herman and Wallace, a PT based company (*Herman & Wallace Pelvic Rehabilitation Continuing Education - Home*, n.d.), and OT Pioneers through Lyndsey Vestal (*Homepage | Lindsey Vestal's Courses*, n.d.). Access to continuing education is key to increasing the number of PHOTs in practice and meet the growing population and need of pelvic health patients.

Additional continuing education was recommended by participants to enhance the PHOT skill and scope of practice. Mindfulness based trainings, nervous system regulation, and central sensitization or chronic pain education are also being studied and used within pelvic health rehabilitation (Vandyken & Hilton, 2017, Brotto et al., 2015).

Increasing public awareness of pelvic healthcare and the impact of pelvic floor dysfunction may also drive the need for more pelvic health providers and trainings. A scoping review by Davis and colleagues (2010), indicated the need for "more specialist services [for PFD] within primary care." The authors postulate that increasing the number of PH providers in primary care would free up resources and time of primary care providers. This would allow PFD patients access to the care they need sooner and increase continuity of care. Davis and colleagues also concluded that the management and assessment of patients with PFD is multifactorial and time consuming.

Care of the pelvic health patient requires an interdisciplinary team to address all the layers causing PFD while not compromising "optimal care." Study participants reflected this finding in their discussions of patients' prior experiences with other pelvic healthcare providers and concur on the need for a more cohesive approach to pelvic healthcare. Other rehabilitation disciplines,

such as physical therapists, similarly agree that an interdisciplinary approach is required to address PFD diagnoses and pain symptoms such as sexual pain or chronic pelvic pain (Vandyken & Hilton, 2017).

*Limitations*

A limitation in this study is the homogeneity of our participants based on their gender, location, and years in practice. Most of our study participants (n=12) identified as female, and all but one participant practiced in the United States. The willingness to participate in research was also a limiting factor in whom we could contact for an interview.

*Future steps*

This study is the first that we know that addresses PHOTs perceptions of how OHCPs view and value OTs communication, and collaboration. Future studies may assess additional perspectives within pelvic healthcare through inclusion of OHCPs collaborating with PHOTs, and potentially patients who have received PHOT. Another step would be to interview patients who received PHOT services and gather data on their patient perspective.

*Clinical Implications*

Increasing OHCPs awareness and understanding of PHOT, and how we affect patient outcomes has to come from the OT profession itself. Face to face interaction, teach back, and closed loop communication were identified as most ideal methods of communication by Jenkins and colleagues (2023). However, Jenkins and colleagues also discussed the need for personalization of communication and understanding that personal preference and expectation are a large influence of effective communication in healthcare.

Occupational therapists are our own best advocates for our role in pelvic health, and the burden of proof is on us to create an open door of communication with OHCPs. Using our skills in motivational interviewing and therapeutic use of self, we can learn more about the members of

our interdisciplinary teams and create deeper connections with OHCPs and patients. Thus, our ability to provide a holistic, patient centred approach to pelvic healthcare will continue to grow.

# CHAPTER 3: IMPLICATIONS FOR OCCUPATIONAL THERAPY PRACTICE

Through this study, I gained insight into where, when, and with whom pelvic health occupational therapists (PHOT) practice in pelvic health rehabilitation. I made discoveries about PHOTs and my own views around their lived experience through the interview process. Occupational therapists with a desire to work in pelvic health practice, should consider multiple modes of communication, especially when collaborating with other healthcare providers (Jenkins et al., 2023).

Additional training is required for all pelvic health rehabilitation specializations. However, it is within the OTs scope of practice to attend these trainings and become certified in pelvic health rehabilitation. The novelty of this emerging practice area for OTs, can be viewed as an opportunity to take a more patient-centred and collaborative role in pelvic healthcare. OTs may use their knowledge of therapeutic relationships to increase patient accessibility to pelvic healthcare.

Understanding the unique roles of OHCPs and interdisciplinary care teams allows OTs to become leaders on patient care teams and facilitate a collaborative practice. Davis and colleagues (2010) supported the improvement of interdisciplinary education, communication, and mutual understanding in settings such as primary care or hospitals. The authors argued that interdisciplinary collaboration in the early stages of pelvic healthcare would lead to better patient outcomes and healthier ageing (Davis et al., 2010).

OTs are primed to be first responders in the treatment of pelvic floor dysfunction. Our top down, patient centred approach is already proven to increase patient quality of life and independence. In the practice of pelvic healthcare, we can help mitigate environmental and contextual factors leading to pelvic floor dysfunction. A collaborative practice with mutual

interdisciplinary understanding allows PHOTs to make appropriate referrals when needed. Thus, patients will receive the correct care for their symptoms sooner and allow OHCPs to focus on quality patient care, rather than quantity of patients.

To facilitate this streamlining of interdisciplinary care, PHOTs may be effective in advocating for change at the institutional or administrative level. Liu and colleagues (2021) studied the positive and negative influences on interdisciplinary communication. They found that biases, lack of understanding, and responsiveness were the top influencers during professional consultations within healthcare teams (Liu et al., 2021).

PHOTs at the administrative level may become advocates and "quarterbacks of care" for patients within interdisciplinary settings. By facilitating shadow opportunities between professions, advocating for PHOT, and creating pelvic health screening forms, PHOTs may use their knowledge to increase mutual professional understanding. This understanding and respect between healthcare professionals will increase PHOT referrals and elevate our voice as pelvic healthcare experts.

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APPENDIX A

1) Consent page
2) Name (fill in the blank)
3) Age (fill in the blank)
4) Gender (check box + fill in the blank)
    a. male, female, nonbinary, transgender, other
5) Title (check box + fill in the blank)
    a. OT, OT assistant, retired, other
6) Degree (check box + fill in the blank)
    a. Associate degree, Bachelor's Degree, Master's Degree, OTD, PhD, other
7) Years of experience in occupational therapy (check box)
    a. less than 5, 6-10, 11-15, 16-20, 21-25, 26+
8) Years of experience in pelvic health occupational therapy (check box)
    a. less than 5, 6-10, 11-15, 16-20, 21-25, 26+
9) What are all the practice areas you work(ed) in (check box + fill in the blank)
    a. Hands, orthopedic, spinal cord injury, traumatic brain injury, sleep, pediatrics, cognition, other
10) In what practice setting do/did you work (check box + fill in the blank)
    a. Outpatient, inpatient, acute, home health, community, other
11) Location in which you practice (drop down menu)
    a. Start with Country, then select State.
12) Please identify treatment or treatment modalities you use with your pelvic floor clients (check box + fill in the blank)

a. Yoga, biofeedback, internal work, other

13) If you are willing to participate in a 45 minute interview, please provide your phone number and/or email below (fill in the blank)

14) If you know of other pelvic health occupational therapists that would be willing to participate, please share the link below.

# APPENDIX B

1. Tell me about how/why you came to practice in pelvic health?
2. What education, if any, did you receive on pelvic health?
    a. What education/training do you think is essential?
3. What conditions do you usually see with your clients in the pelvic health setting?
4. I see from your survey questions you use XYZ modalities/ treatments, can you tell me how you use these in a typical session?
    a. Which do you feel have been the most successful for your clients?
    b. How do you address pelvic health issues with occupation-focused interventions?
    c. How do you keep your interventions client-centred?
5. In what ways does your approach differ from that of your colleagues? (any physicians/ PT's that you work with etc?)
    a. How does pelvic health OT complement or enhance the work of other professions?
    b. How can other professions complement/enhance/support OT for PH patients?
    c. How do you create relationships with other practitioners? (cold calling, referrals, lunch and learns etc?)
    d. What has been the response of colleagues/other professionals about your role in pelvic health?
6. What would be the ideal setting for occupational therapists in pelvic health?
    a. Who do you imagine OT's partnering with to best serve patients/clients? (e.g.: OB, Urology, Gynecology, primary care)
7. What have been your clients' experiences in pelvic health treatment prior to coming to you?

8. What needs to happen in our industry for occupational therapists to better support the pelvic health needs of our communities?

# LIST OF ABBREVIATIONS

PFD: Pelvic floor dysfunction

PHOT: Pelvic health occupational therapist

OHCPs: Other healthcare providers