Professional development from the perspective of newgraduate physiotherapists within Australian hospital settings: A qualitative study

S. Tan¹, A. Phan¹, R. Martin², A. Mandrusiak¹ & R. Forbes¹

Abstract

Introduction: The transition from physiotherapy student to clinician within hospital settings has been identified as overwhelming, leaving new graduates experiencing significant anxiety and stress. Professional development plays a major role in facilitating the transition from student to clinician. However, the perceived professional development needs of new graduates in hospital settings and the factors that influence graduates' decision-making regarding professional development remain relatively unknown. The aim of this study was to explore the professional development needs of new-graduate physiotherapists working in hospital settings and to explore graduates' decision-making relating to engagement in professional development.

Methods: A qualitative study utilising a general inductive approach was undertaken to investigate new-graduate physiotherapists' experiences. Telephone interviews were conducted with 15 new-graduate participants, and data were subject to thematic analysis.

Results: Five key themes regarding hospital-based new-graduate physiotherapists' professional development needs and decision-making were generated following analysis: 1) practical and clinical relevance, 2) influence from external supports, 3) translation to practice, 4) accessing professional development and 5) professional development for the future. This provided insight regarding the challenges faced in accessing professional development during the transition from student to clinician.

Conclusions: This study has highlighted the complexity of new-graduate physiotherapists' decision-making and perceived needs surrounding professional development within the hospital setting. New-graduate physiotherapists perceived that the hospital workplace provided sufficient resources for professional development. However, guidance from supervisors and colleagues within the hospital workplace was

Correspondence

Romany Martin romany.martin@utas.edu.au

¹ School of Health and Rehabilitation Sciences, The University of Queensland, Brisbane, Australia

² School of Health Sciences, The University of Tasmania, Launceston, Australia

highly valued by new graduates when choosing professional development, including informal professional development opportunities. Research is needed to further understand the role of professional development of physiotherapists in hospital settings.

Keywords: physiotherapy; professional development; new graduate; hospital; interviews

Introduction

Entering the workforce as a health graduate is known to be a challenging experience (Walker & Costa, 2017). The transition from student to physiotherapist has been reported to be overwhelming, leaving new graduates experiencing significant stress and anxiety (Stoikov et al., 2020). As a result, higher attrition rates are reported during the early stages of physiotherapy careers and may be attributed to the perception of being unprepared for practice along with a dramatic increase in clinical workload (HWA, 2014; Stoikov et al., 2021). The first 2 years of a physiotherapist's career have been identified as a key period for developing confidence and skill acquisition (Hayward et al., 2013), and professional development (PD) plays a major role in facilitating this transition into the workforce (Black et al., 2010; Stoikov et al., 2020). This is accentuated in the hospital setting, with known challenges adapting to what is widely regarded as a fast-paced and complex workplace setting (Black et al., 2010; Stoikov et al., 2020).

PD is defined as any activity performed to maintain, improve and broaden the knowledge and expertise of a health professional and their career (AHPRA, 2019). There are several forms of PD, including formal, structured courses and informal learning, which can be of a purposeful and self-directed nature (Pettersson et al., 2015). In Australia, registered physiotherapists must complete a minimum of 20 hours of PD annually to maintain registration (Physiotherapy Board Registration Standards, 2015). Within the current literature, new-graduate physiotherapists have reported that access to PD is a significant contributor to job satisfaction (Arkwright et al., 2018) whilst also providing the ability to consolidate and build on prior learning, resulting in more efficient patient care (Hayward et al., 2013). Thus, PD can be considered an integral cornerstone in supporting new graduates during their formative years in the profession.

Research has yet to determine the specific activities and needs required from PD to aid with the transition into the physiotherapy workforce, however new graduates have reported PD to be an important steppingstone to consolidate skills in practice (Gunn & Goding, 2009). New-graduate nurses similarly report a positive perception of PD, with it supporting the provision of higher quality of care and teamwork and associated benefits to patient outcomes (Welp et al., 2018). Unfortunately, multiple barriers to accessing PD have been identified, including time, costs and relevance to the health professional (Drude et al., 2019).

In Australia, there is an estimated 4% annual increase of new-graduate physiotherapists entering the workforce (HWA, 2014). Within this cohort, approximately 20% of

physiotherapists are employed within a hospital setting (HWA, 2014). More recently, the proportion of hospital-based employment has been declining due to an increased demand for health services to be delivered within aged-care and community settings (Physiotherapy Board Registration Standards, 2015). Professional dissatisfaction and attrition rates have also been growing. Approximately 15% of physiotherapists have an intention to change careers within the next 12 months (Victorian Government, 2016). Key reasons include unrealistic expectations when entering the workforce and high costs of accessing PD, with these factors more evident in rural and remote areas (Stoikov et al., 2020). New graduates have reported difficulty adjusting to the fast-paced and complex environment of hospital settings (Stoikov et al., 2020). This is thought to be due to a change in job demands, where more responsibility is required and less professional supports are available (Stoikov et al., 2020). New-graduate physiotherapists have identified multiple challenges when transitioning into the workforce, however the PD required to address this has not yet been explored.

Within the literature, PD has been identified as integral in facilitating the transition from student to new graduate. The PD needs of new-graduate physiotherapists have been explored within private-practice settings, where graduate physiotherapists reportedly value the experience of senior colleagues in guiding decision-making (Atkinson & McElroy, 2016) and express a preference for determining their own PD needs (Zou et al., 2021). The importance of PD has also been described in nursing, where mentoring support during new graduates' first year of practice led to graduates feeling supported and confident during subsequent clinical interactions, highlighting the value of timely PD (Duchscher, 2008). Similarly, nursing new graduates who undertake targeted professional development focusing on resilience may be more likely to be retained within their workplace setting (DuBois & Zedreck-Gonzalez, 2018).

These multidimensional factors suggest that PD for new-graduate physiotherapists may need to be tailored to individual preferences. However, there is a gap in the literature, with PD decision-making and perceived PD needs of new-graduate physiotherapists working in hospital settings remaining relatively unknown. It is important to gather insights since the hospital setting presents unique challenges for new-graduate physiotherapists and requires a dramatic adjustment to a fast-paced clinical setting and complex team communication (Black et al., 2010; Stoikov et al., 2021). Understanding the perceived PD needs and PD decision-making of new-graduate physiotherapists may enable employers, mentors and educators to plan or modify PD, thereby facilitating effective transition into clinical practice. Therefore, this study aims to:

- 1. explore the perceived PD needs of new-graduate physiotherapists working in hospital settings
- 2. explore new-graduate physiotherapists' decision-making relating to engagement in PD.

Methods

Design

This qualitative study, conducted from March to August 2021, used a general inductive approach to investigate the research aims (Thomas, 2006). This enabled participants to produce an account of their experiences in their own words without pre-existing theoretical preconceptions (Smith & Osborn, 2015). Semi-structured interviews were used, enabling open-ended questions and allowing participants to freely express their opinions and views regarding the phenomenon. An interview guide (Figure 1) was designed to explore participants' PD experiences in the hospital setting and their future preferences and desires.

Ethical clearance was provided by The University of Queensland Institutional Human Research Ethics Committee, approval number (2020002698).

Figure 1

Semi-structured Interview Framework

Interview Framework

Have you undertaken any form of PD since you graduated?

Now that you have been practising as a physiotherapist, have you identified any specific skills or knowledge that you feel you need to gain from PD?

What challenges have you experienced when prioritising PD? Is it based on what areas you feel are needed?

What has been the role of others, such as your supervisor (includes hospital manager, head of physiotherapy, neurology senior)?

Have there been any conflicts/discrepancies between PD that you want to undertake compared to what others want you to undertake?

As a physiotherapist, when do you feel like it's important to undertake PD, either formal or informal?

What barriers do you face when accessing PD, with both formal and informal settings?

How do you find applying PD into your professional practice? What challenges are you experiencing?

What do you think the role of PD is in your career?

What are you planning in the future around PD?

If you could do any PD, regardless of topic, costs, location, etc., what would it be?

Probing Questions

How does PD relate to your workplace setting?

How important is having the freedom to choose PD?

Participants

A convenience sampling strategy with snowballing was used to allow researchers to access an appropriate participant population with efficiency (Cohen & Arieli, 2011). Three members of the research team (RM/AM/RF) contacted eight known new-graduate physiotherapists working in hospital settings. Each participant was sent an initial email containing participant information, which outlined the purpose of the study and the inclusion criteria. Eligible participants replied with a contact number and preferred time for interviewing. If the participant responded, a second email was sent to confirm an agreed time for interviewing. To encourage the snowballing sample, participants were asked to contact other eligible participants, including professional contacts and colleagues. If no response was received within 7 days, snowball sampling continued with other contacts provided by participants. A convenience sampling strategy was used to select participants. This process continued until data saturation, which occurred when no new information or themes were identified following interviews.

For participants to be involved in the study, they must have practised as a physiotherapist in a hospital setting for a minimum of 4 weeks, allowing for time to have experience of the transition to the workplace (Lao et al., 2021). Participants must have graduated from an entry-level physiotherapy program (bachelor's or master's) from an Australian university. The timeframe defining a new graduate was a maximum of 2 years of practice (Chipchase et al., 2008; Zou et al., 2021).

Data collection

A semi-structured interview framework (Figure 1) was developed by the research team following a review of the literature. This framework contained open-ended questions with relevant prompts (Black et al., 2010). The research team reviewed the draft framework to ensure the questions were targeted to the research question, were unbiased and provided appropriate probes to accommodate for a variety of responses. Phone interviews were conducted by one of two members of the research team (ST, AP) using the same interview framework.

Interview procedure

All interviews were conducted via telephone to allow for flexibility in scheduling and geographical dispersion of participants (Sturges & Hanrahan, 2004). Audio recording was undertaken through a computer microphone using Audacity (version 3.0.3) for transcription. As participants commenced the interview, they were reminded that identities would remain confidential and all data would be deidentified. Consent was reaffirmed. To ensure participants understood the relevance of the research question, a summary definition of PD was provided prior to questioning (Physiotherapy Board Registration Standards, 2015). Interviews ranged from 23 to 30 minutes (mean = 27

minutes). To ensure the research question was targeted, the research team met regularly to refine the interview framework prior to conducting interviews. Interviews were ceased when data saturation occurred.

Data analysis

To perform a thorough analysis of transcripts, the Thomas (2006) framework was used. The main researcher (ST) immersed themselves in the data by listening and transcribing the interviews and completed multiple readings of the transcripts prior to analysis. Thematic analysis was conducted independently, with important ideas annotated with codes in an inductive manner. Codes reflecting similar thoughts were grouped into subthemes when broader themes emerged. Each theme then had supporting quotes assigned to it, which were reviewed thoroughly, and each quote was either validated or disqualified depending on its relation to the theme. Generated codes and themes were discussed amongst the research team across five meetings. ST conducted initial data analysis following the first interview and continued concurrently with data collection. This same process was undertaken independently by another member of the research team (RF).

Data integrity was upheld through several strategies to ensure the trustworthiness and robustness of the analysis and results. It was ensured that clear transcription of data occurred throughout all interviews to minimise bias and assumptions. Steps were taken to guide reflexivity through the analysis process, as the general inductive approach requires researchers to undertake an active role in the construction of the results (Carpenter & Suto, 2006). At the time of the study, two members of the research team (ST/AP), including the lead researcher, were physiotherapy students in their final year of study at The University of Queensland. Being students at the time, these researchers had no experience of undertaking PD as physiotherapists and had limited experience within hospital settings. The remaining researchers (RM/AM/RF) are in academic teaching positions at Australian universities and have extensive experience as physiotherapists and supervisors of physiotherapy students and new graduates across a range of clinical settings. As a research team, we were cognisant of how our professional backgrounds may have impacted the interpretation of participant data and ensuing results. Both researchers undertaking analysis (ST/RF) participated in the process of epoché to identify any preestablished knowledge regarding the subject matter, which allowed the researchers to intentionally study the phenomenon (Englander, 2016). Additionally, interviewees were not known to the interviewers, and personal questions were avoided to prevent response bias. Other measures that were conducted included: adherence to the interview framework, consistent data collection methods and secondary reviewing of recordings post-transcription of data. Regular meetings were scheduled between the research team to ensure data collection and interpretation were unbiased and clear.

Results

Fifteen participants met the inclusion criteria and consented to interviewing (Table 1). Participants were aged between 22 and 25 years, with 11 females and four males. The ratio of males to females reflects the Australian physiotherapy workforce (Australian Government, 2017). All 15 participants graduated from two Australian universities and acknowledged some exposure to PD in their respective hospital workplaces.

Five key themes regarding hospital-based new-graduate physiotherapists' PD needs and decision-making were generated following analysis: 1) practical and clinical relevance, 2) influences from external supports, 3) translation to practice, 4) accessing PD and 5) PD for the future career.

 Table 1

 De-identified Participant Demographic Information

Participant Number	Gender	Employment Status	Age (years)	Time Employed (months)
1	F	PT	23	4
2	F	FT	22	4
3	М	FT	25	3
4	F	FT	22	3
5	М	PT	22	4
6	F	FT	25	16
7	М	FT	24	4
8	F	FT	22	4
9	F	FT	23	16
10	F	FT	22	3.5
11	F	FT	23	18
12	M	FT	22	16
13	F	FT	23	18
14	F	FT	23	6
15	F	FT	23	18

Note: PT = part time, FT = full time

Practical and clinical relevance

As they entered the workforce in the hospital setting, participants expressed difficulty identifying their PD needs and felt they had not experienced sufficient clinical interactions to identify skills and areas for development. Their experience of decision-making regarding PD was often dependent on the relevance of the offering to their immediate practice. Participants would often be prompted to source out PD after dealing with complex or unfamiliar patients, which they attributed to what was perceived as suboptimal treatment outcomes:

When I've seen a patient that has a condition that I haven't seen before, ... it's more reading things when they're new to me or when I felt like I haven't optimised what I've done in a treatment. (P10)

Almost all participants expressed an intrinsic drive to undertake PD with clinical relevance to their current area of practice within the hospital. This was attributed to a feeling of "transitioning" (P5) into a new setting, where they had limited exposure during preceding clinical placements. As a result, participants expressed wanting to feel prepared and competent before their clinical rotation:

Knowing where I'm rotating to and what I'm likely to be exposed to also influences what I choose. ... I'm going to start looking at PD that's more targeted at that area so that I feel prepared and feel like I can treat that new demographic. (P8)

You would prioritise one where it would directly enhance your care. ... I'm about to go into another acute rotation. So, I'd probably choose an acute-based course over something else I'm interested it. (P10)

In some instances, participants expressed a desire to provide optimal patient care and would undertake PD in areas they frequently encountered but had lacked exposure to during clinical placements. Consistently, participants reflected on the importance of providing effective physiotherapy care to all patients:

To improve my ability to treat patients, especially if you see things in their past medical history or something that they've presented with that you're unsure of, it's important that you know what it is so you're able to take it into consideration with your treatment, and it might change or impact what you do. (P6)

Noticeably, some participants expressed a lack of desire to undertake PD if it was assumed that it would not directly apply to their clinical practice. There were several instances when participants felt pressured to "listen in" or undertake PD even though it "didn't feel right to do it" (P4) as it would not have an immediate impact on their practice:

They might have a falls and balance seminar, well great, ... but... it doesn't translate to my practice. (P4)

Influences from external supports and mentors

As participants experience their first years in the hospital setting, the role of others is perceived to contribute towards their decision-making surrounding PD. Initially, participants were unfamiliar with the PD options available and voiced that input from seniors was invaluable. Opportunities to discuss previous PD experiences with colleagues and supervisors was a source of reassurance for participants that formal PD would be effective and valuable:

I think from the more informal sides, there's a lot of conversations with seniors ... about difficult things. I've had seniors ... shadow me with patients, and particularly show me some equipment that I wasn't familiar with. (P6)

Just being able to ... speak to ... more experienced physios and get their opinion on your treatments and your assessments and your patients, I think that's super helpful. (P7)

Collaboration with colleagues was often experienced as the first step in the decision-making process for PD. Participants tended to heavily value social supports, including previous experiences from colleagues and whether other staff members were attending PD courses simultaneously:

But it wasn't very much like a ... "you should do this course; I think we need to do it". It was more of ... "all our new grads, we have this course running", and it was up to you to engage in that yourself. I actually think it's good to flag relevant or helpful courses that people have experienced in the past. (P3)

However, upon entering the workforce, some participants felt pressured into doing PD courses by employers and supervisors. They felt like they couldn't say "no" to the courses even though they may not perceive the value:

Once, I was directly emailed, suggesting that I do a women's health course. And it was my second week of work. It was \$250. And I didn't feel like I had the ability to say no to doing that course. (P3)

Translation to practice

Participants unanimously emphasised the importance of PD and the value they felt it had to their clinical reasoning and practice. Formal PD (e.g., online or in-person courses) was felt to provide greater insight into conditions and complexities of a patient, whereas informal PD (e.g., discussions with colleagues and seniors, self-directed learning) was noted to be more directed to contexts of patient care. Participants voiced their appreciation for having a senior figure as an education source and a sounding board to navigate challenges within the workplace. These factors enabled participants to improve their clinical interactions with patients, "made my practice more effective" (P2) and were perceived to result in better outcomes:

I think it was a great opportunity because I could speak to other clinicians about what I'd learnt ... so that they were able to achieve better outcomes for their patients. (P6)

And you definitely need to take things on board, just even if it's slightly more efficient ways to work or a better way to communicate with your patients, [for example] watching a more experienced physio talk to the patient on how they word certain things or how they might structure the way they work through things. You definitely implement what works for you. (P5)

Experiences of ongoing discussions with senior clinicians were seen as beneficial in providing participants with a larger "toolbox", which allowed them to feel more comfortable and competent in their management of patients. This provided a pathway to find a sense of self and shape what type of clinician they would want to be. Consistently, participants advocated for PD, particularly if it applied directly to patients they were treating currently or had a direct impact on their clinical decision-making:

And then just using that experience, as well. Because ... as a new grad, ... you're seeing patients you haven't seen before, and they might have seen ... a similar presentation like 20 times before, and they might know what kind of treatments weren't the best from their experience. (P7)

Accessing PD

Participants emphasised that accessibility remained a significant contributing factor regarding their decision-making about PD. Participants felt that the hospital workplace provided adequate support for PD by covering costs and allowing for time off work:

We have the 2 days off. ... We were fortunate enough that the hospital I work at funded that for us so they paid for us to go to the course as well. (P2)

The PD supports present in hospital settings are reflected by participants responses, where ease of access was commonly voiced. Senior colleagues would allocate specific times off during the week for reflection and discussions about difficult experiences. Generally, most participants felt well supported to freely access PD and "build up skills" (P11):

We have a weekly in-service ... a department in-service for an hour ... and a new-graduate tutorial every week, ... and we set aside half an hour a week just to chat through cases or ... any practical techniques we need to practice. (P7)

Conversely, participants who embarked on self-directed PD found it challenging to implement time within their daily schedule. Costs for external PD was perceived as a key barrier, while time was a constant worry for participants due to their already high workload in the hospital environment. Consequently, some participants found it difficult to justify the value of different sources of PD:

Honestly, I'd probably say that it's a mix between cost and time at the end of the day. ... I don't want to go out and spend \$300 if you don't have to. (P3)

Your workload can be quite heavy. It's really difficult to advocate for professional development time that you end up doing a lot more of it in your own time. ... You don't have a lot of downtime anyway, so you end up ... giving up weekends to attend courses. (P6)

This challenge was compounded for participants who worked in rural and remote settings, where PD resources were considered limited and where less opportunities were available:

I've attended in person [only] once because it just takes too much time to hire a company car and drive up there and back. It takes out half my day. My major barrier in attending face-to-face professional development is that I'm about 3 hours out of metro Melbourne. (P4)

PD for the future career

As participants reflected on their career pathways, they acknowledged the importance of PD as a way to grow and improve as a clinician. They understood the value of PD and the need for evidence-based decision-making and identified this as an "ongoing role" (P3) in career progression:

I think ... it's important to make sure that you're staying up to date with the latest evidence, just for your own knowledge, and I think it's important with progressing your career. (P14)

You have to continue to build and learn, otherwise you can get a bit stuck. Also, evidence is constantly changing. They're constantly finding new things that work better or are more effective, or they're disproving different treatments. So it's important to continue to learn so that you're able to provide the best care for your patients. (P8)

Additionally, participants expressed the importance of up-to-date information by referencing their experiences from university studies. They acknowledged the value of consistent patient care and the importance of continuously developing clinical skills through PD to achieve this:

But I think what I found going through university, it really instilled in us that continuous professional development, upskilling and pursuing knowledge is important, and I think I got that drive from university, which has really helped me through my career. (P6)

Discussion

The aims of this study were to explore the perceived PD needs of new-graduate physiotherapists working in hospital settings and to investigate their decision-making relating to PD. Our findings highlight that new-graduate physiotherapists value PD that is highly clinically relevant to their current workplace setting. They voice an internal drive to seek PD, when appropriate, as they stive to achieve optimal physiotherapy care

for their patients. The accessibility of PD has also been highlighted as an influence on the decision-making processes of new graduates, along with external influences from colleagues and seniors. In addition, new graduates have expressed the value of PD in facilitating their career development for the future.

Our results indicate that new graduates understand the importance of PD, however the needs they perceive are largely based on their perception of the PD's clinical relevance to their current practice. Their perspectives were largely formed by clinical experiences with patients, as new-graduate physiotherapists are often driven by a desire to deliver effective patient care (Zou et al., 2021). New graduates reflected on challenges that arose with patient complexity, such as unfamiliar clinical conditions, and these challenges often stimulated their pursuit of PD. These findings are consistent with recent literature, where a pertinent factor in sourcing PD is a perception of immediate practical and clinical relevance (Drude et al., 2019; King et al., 2021; Summers, 2015). Our results also suggest that new graduates seek informal PD through senior colleagues, as they perceive this guidance to be clinically relevant to their immediate practice. This is consistent with findings from private-practice settings, where informal supports are thought to provide a steppingstone for improving new graduates' perceived preparedness for practice (Atkinson & McElroy, 2016). Furthermore, literature has indicated that new-graduate physiotherapists value PD through guidance and mentoring from senior colleagues, where they are able to learn from their clinical reasoning and professional behaviours (Ajjawi & Higgs, 2008). These results, together with existing literature, support the premise that decision-making about PD is strongly driven by immediate relevance to practice and the perceived influence that it will have on subsequent patient care.

New graduates highlighted the influence of external supports as a major contributing factor relating to decision-making about PD. It was clear that new graduates valued input from colleagues, and their previous experiences impacted new graduates' choices surrounding PD. New graduates would often partake in PD when recommended by senior colleagues, expressing a lack of familiarity with the PD available in the hospital setting. These findings are similar to reports from new-graduate nurses working in hospital settings, who reflected on the importance of supportive supervisors in assisting with their PD needs, which enabled a sense of belonging and accomplishment within their workplace (Laschinger et al., 2009; Turpin et al., 2021). However, there were instances when new-graduate physiotherapists did not feel they had the opportunity to advocate for self-directed PD. When formal PD was directly recommended by employers, new graduates felt pressured to engage in PD, as they did not want to display a lack of "ambition" or commitment to their new role. Notably, this experience of pressure has been reported in private-practice settings, where new graduates expressed that a lack of relevant PD may contribute towards job dissatisfaction (Arkwright et al., 2018). This factor appears to be invaluable for new graduates as they are often in pursuit of further skills acquisition and career development, which may improve professional retention

within the workforce (Davies et al., 2016). These findings may provide opportunities for PD pathways in hospital settings to be further explored, with the prospect for shared decision-making models for PD activities between new graduates and their workplace to be developed.

As new graduates are beginning their journey as physiotherapists within hospital settings, they seek to pursue PD with a goal of developing clinical reasoning skills as a tool to manage patient complexity. Informal PD was identified as a main source to provide new graduates with a larger skillset and increased confidence in managing unfamiliar situations. These findings are congruous with literature, with new-graduate physiotherapists reporting the value of having an individualised and supportive mentor (Forbes et al., 2021). This previous research further supports that with appropriate guidance and reassurance, new graduates were able to have a sense of ownership over their career development while feeling welcomed and supported within their new workplace (Forbes et al., 2021). New graduates reflected on what they perceived to be adequate mentoring and PD within the hospital setting, specifically when considering skill development for managing complex and unfamiliar conditions. New graduates expressed the value of having a mentor to help negotiate challenges in the workplace, and this mentorship was seen as having a positive impact on subsequent patient outcomes. A key senior mentor to guide new graduates through clinical uncertainties has been recommended, with new graduates viewing this mentor as having an integral role in their transition into the workplace (Stoikov et al., 2020).

Within the hospital environment, new graduates felt that access to informal PD was readily available, but barriers were present when planning or accessing more formal PD. While it was perceived that the hospital workplace often provided time off and adequate funding, new graduates still expressed a lack of freedom to engage in formal PD of their own choice or preference. In many cases, they perceived an expectation to undertake PD recommended by the workplace itself. When new graduates were seeking self-directed PD for career progression, time and cost constraints were large contributors, which is consistent with previous literature (Forbes et al., 2021; Hegney et al., 2010; Lao et al., 2021; Summers, 2015). New graduates expressed concerns about attempting to undertake self-directed PD because they faced an internal "cost-benefit" conflict. This has resulted in new graduates sometimes perceiving a lack of value in PD, feeling that it is not readily applicable to their current setting, a key finding from this study. However, current literature has indicated that if allied health professionals are provided with appropriate time and funding, this may facilitate the ease of accessing PD independently, which may positively impact their clinical practice (Haywood et al., 2013). Therefore, a balance between employer-selected and independent PD should be considered, as research has indicated that professional learning is facilitated through a combination of formal PD and self-directed learning (Chipchase et al., 2012).

Lastly, new-graduate physiotherapists have commonly viewed PD as a platform for career progression and employability (Grehan et al., 2018). PD was perceived to be an invaluable tool for career progression and the development of clinical skills, driven by a desire to achieve optimal patient outcomes. When considering their career development, new graduates within the current study unanimously expressed the importance of ongoing PD to ensure their practice remains evidence-based and contemporary. They acknowledged that physiotherapy is a profession where evidence and subsequent practice are continually evolving and that PD would continue to be a tool to maintain contemporary practice.

Implications

The results from this study support the role of the workplace in influencing physiotherapists' perceived needs and decision-making related to PD. Although new graduates reported access to both formal and informal PD, they experienced several barriers. Senior physiotherapists should continue to collaborate with new graduates to assist with relevant PD pathways for skill and clinical development. Positive attitudes towards PD will also enable physiotherapists to have the autonomy to explore their individual pathways, which may foster workplace satisfaction, career progression and, possibly, retention. To further facilitate PD, hospital workplaces should consider implementing appropriate leave and funding, where resources allow, to encourage new graduates to engage in formal PD. Future research should be conducted to further understand the effectiveness of shared decision-making models between the new graduate and the employer when choosing PD. Exploring perspectives from formal PD providers may also provide further insights into PD needs.

Limitations

Since participants graduated from two different Australian universities, both located in Queensland, the findings may not be generalisable to new graduates from other regions. Regarding data collection, participants' responses may not accurately reflect their experiences due to response bias, where participants provide answers that they deem are helpful to researchers. Participants who may have had negative experiences as a new graduate may not have volunteered to participate or may not have disclosed such insights to researchers, hence increasing the possibility of selection bias. Moreover, interviews were conducted via telephone, which eliminates the observation of non-verbal cues and may have impacted the rapport building process, leading to participants being hesitant to share deep, meaningful experiences.

Conclusion

The findings of this study provide insight into new-graduate physiotherapists' decision-making regarding PD and their perceived PD needs within hospital settings. Practical and clinically relevant PD delivered via both formal and informal pathways were valued by new graduates for both immediate skill acquisition and career development. New

graduates felt that the hospital workplace provided sufficient resources for PD, however participants still valued social supports from others, such as senior staff members and colleagues. Financial assistance and appropriate time off were recognised as key challenges when accessing more formal PD. Participants reflected on PD as a balance between autonomy and support from colleagues to facilitate an effective transition into the workplace.

Conflicts of interest and funding

The authors have no conflicts of interest or funding to report.

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