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Physical therapy students' perceptions for working with persons with mental illness in the USA

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Abstract:

BACKGROUND: Physical therapists provide important services for improving health and function for the general population; however, physical therapy (PT) is infrequently accessed by persons with a primary diagnosis of severe mental illness (SMI). This study examined the attitudes of PT students before and during their participation in a service-learning (SL) program for people with SMI.

MATERIALS AND METHODS: A cross-sectional institutional review board approved qualitative study collected 1-h semi-structured qualitative interviews from seven graduates of a doctor of PT program. Participants were from a New Jersey University program in the USA who participated in an SMI SL experience. Participants were asked about participant attitudes toward people with SMI and their observations during a SL experience using an interview guide. All interviews were digitally recorded, transcribed, and coded using interpretive phenomenological analysis by a team of researchers. This type of qualitative analysis aims to explore participants understanding of their experience without pre-conceived theoretical direction. Recordings, transcripts, and field notes were reviewed for recurring ideas that were summarized into codes. Through independent coding, reflexivity memos, and consensus meetings, data were further analyzed to identify themes. Investigator triangulation addressed differences and aided consensus development.

RESULTS: Before the SL experience, the students reported negative perceptions about people with SMI and feelings of uncertainty and unpreparedness to work with this population. According to student reports, SL supported their personal and professional development and allowed them to see that PT services are beneficial for people with SMI.

CONCLUSIONS: The results of this study indicate that PT students have negative attitudes of people with SMI and feel unprepared to work with this population. The results also support SL as an effective strategy for helping students in their preparation for working with people with SMI.

Keywords:

Graduate education, mentally ill persons, physical therapy modalities, psychiatric rehabilitation

Introduction

Physical therapists play an essential role in reducing pain, improving physical functioning, and promoting safe and appropriate physical activity across a wide range of health conditions. However, physical therapy (PT) services are infrequently accessed by persons with a primary diagnosis of severe mental illness (SMI)[1] and health conditions including diabetes and cardiovascular disease, compromised levels of fitness, and a 20-year shorter life expectancy compared with the general population.[2] Barriers in accessing PT and other health services include a lack of awareness regarding the role and relevancy of PT in mental health,[1,3] costs for services not covered by health care plans or insurance,[1] and limited referrals based on health care provider stigma, stereotyping,

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or prejudice against people with SMI.[4-6] Furthermore, despite the belief that physical therapists consider the treatment of people with SMI to be part of their role and responsibilities,[3] and they possess skills that can help improve the quality of life for people with SMI,[7] physical therapists report having limited confidence that they attribute to a lack of training with this patient population.[3,8-10]

Survey research of PT students outside of the USA found that academic course content and training in mental health and psychiatry are limited in PT curricula and most students receive only minimal training about addressing mental illness (MI) as either a primary diagnosis or co-morbidity.[4] Students who received specialized training had positive attitudes toward persons with SMI.[11] In particular, clinical experiences working with people with psychiatric conditions and having a personal relationship with someone with a MI led to favorable opinions about interacting with people with SMI and helped them understand the complex management of persons with co-morbid mental health diagnoses.[4,6,8]

Little is known about the attitudes of PT students in the USA towards people with SMI, except for the effects of a mental health service-learning (SL) opportunity.[12] The purpose of this study is to explore PT student attitudes toward persons with SMI, their sense of preparation for working with this patient population, and describe their perceptions of SL experiences. Understanding student perceptions can inform the development of curriculum to best prepare them to work with clients and patients with primary or secondary psychiatric conditions. This study is one of the first to explore PT student attitudes about SL in the context of the SMI patient population.

Materials and Methods

Study design and setting

This qualitative study at a Mid-Atlantic University in the USA used a semi-structured interview approach. An interview guide was used to understand participant perceptions and attitudes about working with people with SMI before and during their participation in a SL experience called wellness for life (WFL). WFL was an interprofessional health and wellness program for community-dwelling people living with SMI that has been described elsewhere.[13]

Study participants and sampling

The WFL program included several cohorts of PT students between 2009 and 2014. As part of the program, students were assigned readings related to people with SMI, including barriers to health services. They designed 30-min group physical activity sessions that they led under the supervision of a licensed physical therapist (Ellen Z. Anderson) over the course of the 8-week program and participated in weekly debriefing sessions with a physical therapist and mental health professional regarding their experiences.[13]

Those former students who graduated from the PT program and participated in WFL were invited to participate in the study via recruitment email (n = 35). Seven agreed to participate in the summer of 2016. Further recruitment efforts ceased because thematic saturation or repetition of ideas and codes indicated that perspectives were consistent across participants. Three participants were part of one WFL cohort and four participants were part of two. Six (85.7%) were female and the average age was 30 (standard deviation = 2.88).

Data collection tools and techniques

The interview was conducted via video conferencing by two of the authors (Ann A. Murphy and Sean Karyczak) both trained in qualitative interviewing procedures. Interviews were digitally recorded and later transcribed. This exploratory study used a qualitative approach to identify feelings and perceptions of the participants as a first step to inform future potential quantitative measures in areas where knowledge is limited.[14]

Data analysis

The results of the interviews were analyzed using a three-step data analysis process that follows the interpretive phenomenological analysis (IPA) format. The IPA method was selected as an appropriate and effective way to analyze the data given that most of the researchers actively participated in the WFL program.[15,16] [Table 1]. Reflexivity memos and consensus discussion were used to improve credibility.

Ethical considerations

This study was approved by the authors' institutional review board (IRB ID# 20160000276). All participation was voluntary and data collection occurred post- graduation. All researchers disclosed no financial conflict of interest.

Results

Pre-SL student comments from the interviews were sorted into one main theme of uncertainty and fear. This theme was further elucidated by the following categories (a) negative perceptions, (b) uncertainty, and (c) lack of preparedness [Table 2]. Following the SL experience, three main themes were extracted from the interview transcripts: (a) personal and professional growth, (b) benefits for people with SMI, and (c) positive experience. The themes, codes, categories, and supporting quotes from participants are identified in Table 3.

Table 1 Interpretive phenomenological analysis[12]

Step 1: Each researcher read the first transcript multiple times to become immersed in the text.[15,16] By doing this, the researchers were able to explore the true essence of the participants' words and allow them to guide the analysis process.[25]
Step 2: Each researcher individually conducted a line-by-line coding process in which single meaning units were generated.[16] Throughout this step, the researchers continued to reflect on the research question while generating meaning units to ensure the data analysis directly answered the research question.[26] The researchers continued this step for the remainder of the interviews. Researchers then used investigator triangulation by meeting confirm the findings, add breadth to the phenomenon of interest, and ensured thematic saturation was reached.
Step 3: The researchers reviewed all the meaning units from the seven interviews and identified emerging themes that addressed the research question.[26]
Adapted from Karyczak, *et al*., 2020[12]

Table 2: Semi-structured interview questions

Demographic Questions
1. When did you graduate?
2. What is your age?
3. When were you a part of the WFL project?
4. In how many different locations did you participate in WFL? Which locations?
Thoughts and Impressions before Participation in WFL
1. What motivated you to participate in WFL?
2. What did you hope to learn or gain from the experience professionally?
3. What did you hope to learn or gain from the experience personally?
4. What were your expectations about the clients (people with serious mental illness)?
5. What kinds of interventions did you plan to use when working with the population?
6. Is there anything else you want to share about your thoughts or expectations before starting WFL?
Experiences During WFL
1. Please describe a situation in which you thought things went well during WFL?
2. How did you incorporate what you learned from this experience into your work in WFL?
3. Please describe a situation in which you thought things did not go well during WFL?
4. How did you incorporate what you learned from this experience into your work in WFL?
5. Please describe any additional interactions that still stand out for you?
6. Is there anything else about your experiences during WFL that you want to share?

WFL=wellness for life

Discussion

This qualitative study explored Mid-Atlantic US PT student attitudes and perceptions before and during a SL program working with people with SMI. PT students hold many of the same misconceptions about people with SMI that the general population expresses, namely, concerns about violence and unpredictability and the inability to engage with them in a meaningful way. This exploration also suggests that SL supported students' personal and professional growth and helped them overcome fear and uncertainty that was initially identified.

The current finding that PT students in the US are concerned about personal safety, patient behavior, and effective communication with persons with SMI is consistent with previous work from PT students in the United Kingdom[8] and practicing PTs in Australia.[3] Other studies in India, Australia, and Belgium found that PT students have favorable attitudes toward psychiatry as measured by the Attitudes Toward Psychiatry 30-items (ATP-30). However, it should be noted that the ATP-30 is a quantitative survey measuring agreement or disagreement with statements about the global field of psychiatry and does not allow for an exploration of ideas and feelings about people with SMI.

The population of people with SMI remains underserved by health services in general, including PT services, despite significant chronic health conditions. Additionally, curriculum recommendations for psychiatry and mental health, and standards or objectives for treating people with SMI are lacking. PT students do not typically have specific course work or opportunities to engage with people with SMI in their curricula.[3,4,8] This project was unique in that it offered PT students the opportunity to assess, create exercise programs, and interact directly with people with SMI.[8]

Limited training in psychiatry and mental health and the skills needed to work with people with psychiatric conditions can perpetuate negative attitudes towards people with SMI and compromise their care. Stigma and prejudice against psychiatry and SMI are also known to be detrimental to the physical and psychosocial well-being of individuals who have psychiatric illnesses, including lower expectations of adherence and positive outcomes.[5,19] In addition, persons with SMI who face negative health provider attitudes may limit or avoid seeking health care services that can ultimately lead to poorer health and functional limitations.[19]

Stigma and feelings of unpreparedness can leave PT students and physical therapists uncomfortable or unwilling to work with individuals with MI, which perpetuates their lack of exposure and negative perceptions of this population. Given the high incidence of MI (18% in adults; 50% in adolescents) and psychiatric disorders, including schizophrenia and bipolar (4% in adults; 22% in adolescents) in the USA,[20,21] it is important that physical therapists develop positive attitudes and adequate skills for working with people with SMI. This should not only be considered in the

Table 3: Student attitudes about working with people with severe mental illness

Theme	Codes	Categories	Supporting Quotes
Pre-SL			
Uncertainty and fear	Fear and concerns for safety	Negative Perceptions	"I didn't know if people would be freaking out sometimes, like if we'd ask them to do things, and maybe it might be dangerous at times, or like I don't know, I just don't even know what that would be."
	Concern about ability to participate	Uncertainty	"I figured there would be more challenges for sure whether it's communication or physically. I thought there would be more challenges. For example, I thought they're sedentary or they have difficulty with activities of daily living."
	Lack of knowledge and ambiguity, unpreparedness, and lack of awareness of needs	Lack of preparedness	"[Individuals with a serious mental illness] are definitely a population I hadn't really thought about specifically. It's not something that we really learn a lot about in physical therapy."
Post-SL			
Personal and professional growth	Expanded abilities; working in a new environment; in vivo application of skills, inter-professional practice; and flexibility in practice and adaptation to population needs	Problem solving	"We came up with how we thought we would approach the physical activity portion and within the first week quickly realized that what we had planned was not going to work …[we] had to change our approach. I think that was very helpful. Going in with this plan and then reading your patients, and then getting an idea of what works for them and having to change [the plan] to meet their needs."
	Attain new skills and challenge to improve clinical services	Expanded abilities	"I think the really biggest thing was getting outside the comfort zone…it was just this really positive and challenging experience that probably made us all grow."
	Providing PT services in the context of other disciplines; teamwork	Interprofessional practice	"It was the first time I saw multiple disciplines [e.g. physical therapy, mental health, peers, dietitians] together working with one population and saw how that teamwork and the multidisciplinary approach was really important."
	Identifying deficits in focus and attention; managing time	Working through challenging behaviors	"I would say one challenge was having everybody staying on task. A lot of times they get distracted easily…something's going on in the room. So I think that the biggest challenge was grabbing the attention of everybody."
Benefits for People with SMI	Physical strength, emotional well-being	Improved health and fitness levels	"It shows you the benefits of exercise and even if you start on a low level the overall benefits, reducing anxiety, increasing endurance, wellbeing."
Positive Experience	Includes students/graduates and participants. Reflective of process and outcomes.	Mutually enjoyable	"The most important thing I took away…[it] was just a joyful experience. I really enjoyed it. I thought that it was something that was interesting. I really enjoyed participating in it. It was beneficial to me as a student to prepare me for my career and I thought that it was beneficial to them just to get [the people with SMI] up and moving…[with] an hour of something fun to do."
	Reflective practice, highlighting motivation, and adaptation of practice {positive exp. -engagement	Engagement	"I remember there was a situation where one of the men who was participating in the program was having difficulties getting motivated. I recall one of my colleagues … working very closely next to him, reiterating everything that we were going through and doing the movements in front of him. I found that once we got to the more active stuff he got excited and kind of lit up and stood up and started participating ….and it was really nice to see.

SL=Service-learning, SMI=Severe mental illness, PT=Physical therapy

context of psychiatry but also in the general practice of PT where many patients present with undiagnosed MI and psychological challenges that interfere with their achievement of goals during chronic physical illness or recovery from injury.[9] Indeed, MI is recognized globally as a leading cause of disability, and causes significant socioeconomic burden.[20,21]

Educating health care students about SMI can have a positive impact on their attitudes about working with people with psychiatric conditions.[6,8,11] However, lectures and seminars that are the most common strategy for teaching about MI[4,8,10] have mixed results for changing attitudes.[6,11,24] Simulation experiences with actors portraying patients with SMI reduce bias and enhance readiness for working with a mental health population.[24] Additionally, PT students with some previous clinical experience or exposure to patients with mental health concerns have more positive attitudes toward psychiatry compared to students who did not have any clinical or first-person experiences.[8] In this study, PT students participated in a SL program that gave them exposure to people with SMI. They reported that the experience not only helped them to grow personally and professionally but also they found working with people with SMI to be joyful and rewarding.

Limitations and Recommendations

This study explored attitudes of students who participated in WFL from 3–9 years ago. Thus, they needed to recall their impressions of people with MI and feelings of readiness to work with this population from several years ago. Nevertheless, the former students reported significant memories associated with the project suggesting a lasting impression. Additionally, seven of 35 potential participants agreed to be interviewed. Those who did not participate in the study may have had different attitudes and impressions than those who did participate. Despite this limitation, however, thematic saturation was achieved. As with all qualitative analysis, this study gives perspectives of those interviewed and did not measure knowledge or skills or permit inferences to be made.

More work is needed to develop a definitive educational approach that will combat stigma and prejudice in MI and increase the number of health care providers prepared to serve the needs of people with psychiatric conditions. Correspondingly, more study is needed to understand the preferred amount, frequency, or duration of training for students to acquire positive attitudes, skills, and confidence in working with people with SMI.[4,6,11] Nevertheless, given the prevalence of MI in the USA, it is imperative that PT curricula include dedicated course content about MI and severe psychiatric disorders as well as engagement with people with SMI that addresses health and cultural considerations.[25,26] Opportunities for PT students to develop clinical skills and cultivate positive therapeutic relationships will help to meet the needs of this typically underserved population.

Conclusion

This study is the first to report on the attitudes of US PT students about people with mental health concerns. The reported interviews provide evidence that PT students have stigmatizing attitudes of people with SMI and feel unprepared to work with this population. From the reflections of their experiences with WFL, this study also supports SL as an effective educational strategy for helping PT students in their preparation for working with people with SMI.

This study explored attitudes of students who participated in WFL from 3–9 years ago. Thus, they needed to recall their impressions of people with MI and feelings of readiness to work with this population from several years ago. Nevertheless, the former students reported significant memories associated with the project suggesting a lasting impression. Additionally, seven of 28 potential participants agreed to be interviewed. Those who did not participate in the study may have had different attitudes and impressions than those who did participate. Despite this limitation, however, thematic saturation was achieved. As with all qualitative analysis, this study gives perspectives of those interviewed and did not measure knowledge or skills or permit inferences to be made.

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Conflicts of interest

There are no conflicts of interest.

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