Review Article

e-Professionalism in Psychiatric Mental Health Nursing: A Systematic Review and Narrative Synthesis

Abstract

Background: This study systematically examines the challenges and issues of digital professionalism in Psychiatric Mental Health (PMH) nursing over the past decade, addressing the lack of recent research in this area. **Materials and Methods:** Conducted as a systematic review, it analyzed a subset of 12 studies focusing on e-professionalism in PMH nursing. The search was performed in April 2023 across databases including Medline, EMBASE, PsycInfo, CINAHL, Web of Science, Scopus, and Cochrane, covering papers published between January 2013 and April 2023. The quality of the primary papers was evaluated using the Kmet standard criteria, and a narrative synthesis approach was used to summarize the findings. **Results:** The results reveal that e-professionalism issues in PMH nursing, particularly in legal and ethical dimensions, have received little attention in recent studies. The study identified two competing scenarios in mental telehealth nursing, emphasizing the need to find a balance between them for successful implementation. **Conclusions:** The findings highlight the importance of psychiatric mental health nurses developing a comprehensive understanding of e-mental health interventions, including knowledge, skills, affective factors, ethics, and regulatory considerations. The study concludes by calling for greater focus on digital professionalism in PMH nursing to address the evolving challenges in the field.

Keywords: *Digital, professionalism, psychiatric mental health nursing, telehealth, telenursing*

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Introduction

In recent years, the application of information technology in psychiatry, including training, research, and services, has become an irrefutable phenomenon. Psychiatric-Mental Health Nurses (PMHNs) now offer virtual counseling and therapeutic interventions and facilitate participation in online support communities.[1] While there are many promising outcomes in the digital mental health space, most digital mental health providers have concerns about etiquette, such as ethical and legal issues. Lack of privacy, contact by undesirables, transmission of unfounded information, hacking, and unnecessary haggling were some of these professional concerns.[2] The creation of "dual citizenship" allows mental health providers to use networks for professional connections but also poses dangers, such as ensuring the protection of patient privacy and confidentiality of information.[3]

Digital professionalism is a response to the need for appropriate professional behavior by healthcare providers when using digital media. Digital professionalism in psychiatric mental health nursing encompasses several issues and challenges. Mental healthcare is inherently complex, requiring nurses to adapt to various theories, practices, and philosophies. New practitioners often struggle with the intricacies of mental health recovery, which may conflict with traditional nursing roles, which focus on curing rather than supporting recovery.[4] The integration of digital tools in psychiatric nursing presents both opportunities and challenges. A study found that 92.3% of mental health providers reported that they had not received training on eHealth delivery or related professional issues.[2]

There is limited research specifically focused on digital professionalism in the experiences of psychiatric mental health nurses. However, several studies have explored the broader topic of digital professionalism and the use of technology in nursing education and practice. Mather

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et al.[5] (2019) developed the 4E3P model to assess the readiness of healthcare environments and the capability of nurses in developing digital professionalism. In addition, the Nursing and Midwifery Council (NMC) in the UK has established guidance for nurses, midwives, and nursing associates on the responsible use of social media, emphasizing the importance of maintaining professional conduct in digital communication.[6] Given the lack of recent studies that directly address digital professionalism in psychiatric mental health nursing, it seems that, in light of the emergence of digital psychiatry as a new paradigm, addressing digital professionalism in PMHN can help clarify the challenges and professional issues that psychiatric mental health nurses may face in the digital domain. To fill the gap, the current study aims to "systematically examine the issues and challenges of digital professionalism in psychiatric mental health nursing" over the past decade.

Materials and Methods

We conducted a systematic review of the recent literature on education, models of care, and interventions in digital PMHN from April 2023 to June 2023. The present review includes a subset of the identified studies that reported on the ethical and legal challenges and issues of e-PMH nursing. The study was conducted based on the Preferred Reporting Items for Systematic review and Meta-Analysis Protocols (PRISMA 2020-compliant systematic review) and the methodology of the Cochrane Collaboration [Figure 1: PRISMA flow chart of the study]. The Patient-Intervention-Outcome (PIO) framework was used for the research question: in the PMHN discipline (P), how digital professionalism (I) specified. with what attributes? (O). The study protocol was not registered in the Cochrane database.

Our search was conducted in April 2023 in the Medline, EMBASE, PsycInfo, CINAHL, Web of Science, Scopus, and Cochrane databases and included papers published between January 2013 and April 2023. Our search terms (keywords and MeSH terms) reflected three key concepts: "*psychiatric mental health nursing*," "*digital*," and "*professionalism*" (full search term available on request). Synonymous terms such as e-professionalism, digital mental health, mental health nursing, nurs*, and Psychiatric-Mental Health Advanced Practice Nurse (PMH-APRN) were also combined with Boolean (AND, OR, NOT) search terms. We limited our search to English-language publications that were available in full text. If the full text could not be accessed, authors were contacted for relevant papers.

The studies were original qualitative and quantitative studies that (a) were in the areas of education, research, and management of digital PMHN; (b) were descriptive or interventions of digital models of PMH care delivery; (c) focused on professionalism in digital mental health care; (d) were qualitative studies of experiences with professional

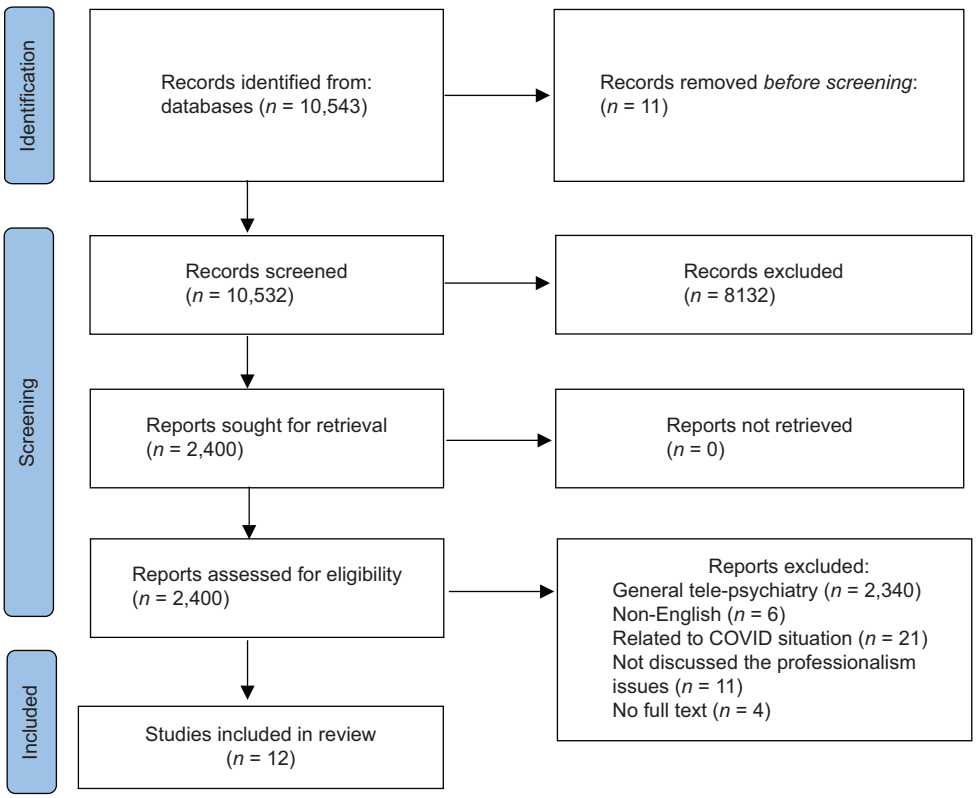

Figure 1: PRISMA 2020 flow chart showing selection of studies for inclusion

issues in digital PMHN; and (e) community-based models and interventions aimed at digital mental health.

Exclusion criteria were a) studies that did not report relevant professional outcomes; b) editorials and commentaries; c) studies that were considered unpublished, such as proceedings, dissertations, and gray literature; and d) non-English language studies.

Results of the original search undertaken were screened using the Covidence online software (https://www.covidence.org). After duplicates were removed, two reviewers FG and VZ screened by title, abstract, and full text. The Cohen's kappa coefficient was measured for inter-rater reliability between two reviewers. The coefficient value was 0.84, indicating almost perfect agreement. Each study required two "yes" votes to be included. All disagreements (9 papers) were resolved through consulting with the independent third reviewer.

Primary papers were evaluated using the Kmet standard criteria for evaluating the methodological quality of both quantitative and qualitative research.[7] Quantitative papers were scored out of 14 points, and qualitative papers were scored out of 10 points based on study design, participant selection, methods of data analysis, and clarity and interpretation of results [Table 1]. Each paper was scored by two reviewers. The total score was expressed as a percentage of 100 to account for items that did not apply.

We developed a data extraction table and guidance notes to support consistency in the synthesis of study results [Table 2]. A co-author prepared a textual summary for each included study, which was then reviewed by both first authors. The textual summaries were refined and finalized through consensus discussions within the author group. Finally, the structured table was used to systematically capture key information from the studies, including details about study characteristics, participant demographics, the nature of digital professionalism interventions, identified ethical and legal issues, and the methodological quality of each study.

In the narrative synthesis, findings from the included studies were integrated and summarized. This process involved identifying key themes and patterns, exploring how challenges varied across different study settings and populations, and analyzing factors influencing the results. Key findings were aggregated, grouped into themes based on common issues, and then interpreted to provide a comprehensive overview of digital professionalism in psychiatric mental health nursing. Variations in findings were discussed, considering differences in study quality, context, and methodologies. Since our review included multiple settings, we did not aim to develop a theoretical framework underpinning the e-professionalism of PMHN.

Ethical considerations

The research plan received approval from the Ethics Committee at Shahid Beheshti University of Medical

Table 1: Clinical characteristics

Criteria		Beebe L. (2018)	Beebe L. (2014)	Khodadadi (2018)	Moghimi (2018)	Uslu, E. and K. Buldukoglu (2019)
1	Question/objective sufficiently described?	2	2	2	2	2
2	Study design evident and appropriate?	2	1	2	1	2
3	Method of subject/comparison group selection or source of information/input variables described and appropriate?	2	1	2	1	2
4	Subject (and comparison group, if applicable) characteristics sufficiently described?	2	2	2	2	2
5	If interventional and random allocation was possible, was it described?	1	1	2	1	2
6	If interventional and blinding of investigators was possible, was it reported?	0	0	2	0	2
7	If interventional and blinding of subjects was possible, was it reported?	N/A	N/A	2	N/A	N/A
8	Outcome and (if applicable) exposure measure(s) well defined and robust to measurement/misclassification bias? Means of assessment reported?	2	2	2	2	2
9	Sample size appropriate?	2	1	2	1	1
10	Analytic methods described/justified and appropriate?	2	2	2	2	2
11	Some estimate of variance is reported for the main results?	2	2	2	2	2
12	Controlled for confounding?	1	1	1	1	1
13	Results reported in sufficient detail?	2	2	2	2	2
14	Conclusions supported by the results?	1	2	2	1	1
Total score/Total possible score		21/26	19/26	27/28	18/26	23/26

Table 2: Characteristics of included studies

	Country	Study design	Study population	Follow-up period	Kmet score/100	Outcomes investigated	Key findings
Van Der Krieke, L., *et al*. (2014)[13]	Netherland	Systematic review	Studies about e-mental health up to July 2012 (*n*=28)	-	Not primary qualitative	Types of e-health self-management intervention, Evidence on clinical outcomes and cost-effectiveness, The extent of orientation of service users	The issues about facilitate the shared decision-making paradigm in e-mental health and transit from the paternalist paradigm and the indicators of service user involvement.
Beebe, L., *et al*. (2018)[18]	United States	Descriptive-correlational (The original study was a randomized controlled trial)	Outpatients with schizophrenia and schizoaffective disorder (SSDs) (*n*=87)	9 months	80.70	The manuscript reports content analysis, as well as quantitative descriptive and correlational analyses from participant discussions during weekly calls over a nine-month period.	The study showed that weekly Telephone Intervention Problem Solving (TIPS) calls during 9 months to outpatients with SSDs revealed some racial discrepancies in symptom interpretations and treatment delivery methods in patients, reflecting cultural bias by clinicians.
Beebe, L., *et al*. (2014)[19]	United States	Randomized controlled trial	Outpatients with schizophrenia and schizoaffective disorder (SSDs) (*n*=30)	3 months	73.10	The purpose of this study was to compare the effect of telephone call intervention only, text messaging intervention only, and both telephone call and text message intervention, over three months, on symptoms and medication adherence in individuals with SSDs.	The findings showed that adding text messages to the TIPS intervention provides small gains in symptom reduction and increased medication adherence. Applying tele-interventions that might be optimally useful and examine the intervention's effects over longer time period are the secondary outcomes of the study.
Diebold, K., *et al*. (2023)[20]	United States	Systematic review	Studies that reported quantitative or qualitative data on the use of standardized instruments during the emergency orders of detention (EOD) process via telehealth (*n*=3).	-	Not primary qualitative	The purpose of this systematic review is to describe the consistency or discrepancy between suicide assessment instruments used in-person as opposed to telehealth during the EOD process, and determine if there is a difference in the number of EOD involuntary holds and hospital admissions rates among patients assessed via telehealth compared to in-person.	The findings showed inadequate training of mental health professionals and lack of use of standardized tools to assessment of risk via telehealth. The concern of relying only on clinical judgement and related provider-specific factors and increasing in involuntarily psychiatric admissions via telehealth are the key findings of the study.
Haregu, T. N., *et al*. (2015)[22]	Kenya	Systematic review and meta-analysis	Randomized controlled trials was conducted that compared telephone-based therapy with usual care for depression (*n*=9).	6 weeks-12 months	Not primary qualitative	The aim of this systematic review was to produce an up-to-date synthesis of the results of RCTs that evaluated the effectiveness of TBT in the management of patients with depression as compared to usual care.	The results showed that TBT was not better than usual care in treatment duration of less than 6 months. The issues such as need to available infrastructures and applying a structured approach of communication with clients are the secondary results of the study.

Contd...

Table 2: Contd...

	Country	Study design	Study population	Follow-up period	Kmet score/100	Outcomes investigated	Key findings
Khodadadi, N., *et al*. (2019)[14]	Iran	A single-blinded randomized controlled trial	66 veterans with Post-Traumatic Stress Disorder (PTSD) who referred to the outpatient clinic.	6 months	96.40	The present study aimed to investigate the effect of text messaging-based psychiatric nursing on the severity of symptoms and quality of life in veterans with PTSD.	The results showed by two mechanisms of making aware and also motivating patients by short messages as reminders, the text messaging improved the PTSD symptoms and enhanced quality of life and lowered the frequency of PTSD recurrence in veterans with PTSD.
Moghimi, M., *et al*. (2018)[15]	Iran	Field trial study	70 mothers whose mentally retarded children were studying in exceptional schools	1.50 months	69.20	The study aimed to determine the effect of resilience teaching via SMS on the stress of mothers of educable mentally retarded children.	The results showed that feeling support by a health professional in addition to increasing knowledge by SMS-based consultation maybe were effective in increasing resiliency and reducing stress in mothers suffering from caregiving burden.
Nagel, D. A. and J. L. Penner (2016)[16]	Canada	A review of literature	Studies that did reflect conceptual models specific to care delivery by telenursing (n=8).	-	Not primary qualitative	The study aimed to capture a comprehensive perspective of the broad scope of nursing practice and delivery of safe, appropriate, and holistic nursing care using telehealth technologies.	The study proposed a conceptual framework of telehealth nursing. The model consists of four aspects: Knowing the person/presence, building a picture/contextualization, nursing competencies, and clinical decision making.
Steinkamp, J. M., *et al*. (2019)[20]	United states	Systematic review	Studies around technological adherence interventions relate to improving the accuracy of adherence measurement (e.g., ingestible biosensors, smart pill bottles, and directly observed remote medication ingestion) (n=128).	Not mentioned	Not primary qualitative	The review is designed to provide a broad trans-diagnostic overview of research themes and intervention types, with an eye toward developing a data-driven conceptual framework of technology-based adherence interventions for mental health and substance use disorders.	The findings suggested that selecting intervention type and delivering modality are vital issues at telemedicine. Applying novel methods for selecting a better compromise between accuracy and practicality is important. The concern of overestimation in self-report assessments in telemedicine also should be considered.
Uslu, E. and K. Buldukoglu (2018)[18]	Turkey	Randomized controlled trial	Patients who were hospitalized in a university hospital and diagnosed with schizophrenia (n=45).	2 months	88.50	This study aimed to determine the effect of Telephone Intervention Problem Solving (TIPS) on medication adherence in individuals diagnosed with schizophrenia.	TIPS is a telenursing application that can prevent patients with schizophrenia from discontinuing medication willingly and increase their belief in the necessity of medication and medication adherence. However, nurses are frequently trained as clinical nurses, resulting in limitations related to transferring from direct care to telemedicine interventions.

Contd...

Table 2: Contd...

	Country	Study design	Study population	Follow-up period	Kmet score/100	Outcomes investigated	Key findings
Uslu, E., *et al*. (2019)[19]	Turkey	Review study	-	-	Not primary qualitative	This review aims to introduce TIPS to psychiatric nurses and to guide them to incorporate TIPS into their practices.	The results showed that the telephone intervention problem solving can be a standardized option of care for psychiatric nurses that has some technical considerations. Using a scheduled program with a protocol, making flexibility based on patient situation and assessing the effective time period of the intervention, setting a face-to-face interview at the first of intervention, and shortening of call's durations over time are necessary.
O' Conner S., *et al*. (2021)[17]	Ireland	Narrative review	Studies were included if they contained participants who were students or learners from the medical, nursing or allied health fields at any stage of their career and digital professionalism on social media had to be part of the study (*n*=11, number of studies with nurse students=2).	-	Not primary qualitative	The review questions were: 1) How is digital professionalism on social media taught? 2) What impact does education on digital professionalism on social media have on learning among these student and practitioner groups? 3) What factors affect the development and delivery of this type of digital professionalism curricula?	"Acquiring knowledge" and "refining behavior and skills" are two major themes extracted from the study results. Improving the information literacy skills, changing the privacy settings on social media accounts to protect personal information and appearing more confident engaging online are some of these behavior refinements.

Sciences under reference number IR.SBMU.PHARMACY.REC.1401.057. The authors ensured originality in the study's content to prevent plagiarism. Additionally, the researchers maintained integrity by refraining from data fabrication or falsification during the manuscript preparation.

Results

From an initial pool of 10,543 references, we retained 2400 studies [see Figure 1, reporting the PRISMA 2020 flow chart]. The list of included references (n = 12) is reported in Table 2. The list of excluded references, along with reasons for exclusion after checking the full text, is reported in the supplementary information.

Study overview

The findings of the systematic review revealed that studies paid little attention to the issue of digital professionalism and that mental health nursing studies largely evaluated the effects of remote interventions on client outcomes. The studies were conducted in seven different countries. Of the 11 studies, four were from the United States,[8-11] one each from Kenya,[12] the Netherlands,[13] Iran twice,[14,15] Canada,[16] Ireland,[17] and Turkey twice.[18,19] A one-arm randomized trial[11] was one of four randomized controlled trials, three narrative reviews,[16,17,19] four systematic reviews,[10-13,20] and four randomized controlled trials.[8,9,14,18] Follow-ups lasted between 1.5 months[15] and 12 months.[12] The mean Kmet quality assessment score for quantitative papers was 81.6 (out of 100) and ranged from 96.4[14] to 69.2.[15] From randomized control trials, the smallest study had 30 participants[9] and the largest 87.[8] The largest systematic review had 128 reviewed studies[20] and the smallest had 3.[10]

Narrative synthesis

Knowledge aspect in E-professionalism

The reviewed studies revealed that PMH nurses need to overcome complex processes in mental healthcare delivery on digital platforms.[16]

According to Nagel (2016), the process of telehealth knowledge realization is sparked by a new image or identity of PM telehealth nurses with the following three

core competencies: knowing the person, relational practice, and decision making (16). Creating a mental image of the caller and their situation and getting to know him/her needs a clinical-originated knowledge to grasp the situation, determine the urgency of the issue, accurately interpret the concerns, and provide advice.

Deibold (2023) demonstrated that RN nurses were concerned about the veracity of the telehealth system's assessment of suicidality. They perceived variations in the rate of hospital admission between patients evaluated via telehealth and those evaluated in-person. The phenomenon of "increased involuntary psychiatric admissions" was noted, which nurses attributed to inadequate training.[10] According to Nagel, telehealth assessments involve more than just gathering information; they also involve creating an impression of the user's world and forging an emotional and cognitive bond.[16]

Pan (2021) emphasized that information accuracy plays a crucial role in telehealth. Despite the necessary of correct evaluations for determining the effectiveness of virtual interventions, he claimed that self-reported data from telehealth platforms tend to have an overestimation bias, which could skew or distort the findings.[21] However, Nagel demonstrated that in order to address the issue of validity in telehealth treatment, PMH nurses should possess strong clinical knowledge, the ability to integrate data from various sources, such as electronic health records, and the ability to manage information.[16]

According to O'Connor (2021), digital professionalism requires healthcare providers to develop digital literacy as part of their professional growth. This means that acquiring knowledge is a basic ground of learning about digital professionalism.[17] Deibolk (2023) expressed concerns about relying solely on clinical judgment via telehealth due to the effects of various provider-specific factors such as licensing and local regulations.[10] Incorporating professional policies and real-world case studies that illustrate the impact of poor digital professionalism on individuals and organizations can enhance the realistic understanding of unprofessional digital behavior.[17]

Skill aspect in E-professionalism

Telehealth is considered a nursing care model. The delivery, management, and coordination of nursing care services provided via telecommunications technology require integrating interdisciplinary models, team processes, technological expertise, marketing, communication, relational practice, and clinical decision making.[16] Many clinical competencies required for telehealth practice build on preexisting general knowledge and skills, but they also require adaptation for telehealth practice. Formal preparation is necessary to build on or adapt these clinical competencies. Specific training in telephone consultation, assessment, and decision making is essential for developing telehealth skills.[16]

Mastering clinical competencies in telehealth, particularly in clinical decision making, is crucial for achieving e-professionalism outcomes. Van Der Krieke (2014)[13] revealed that selecting optimally useful interventions is vital in telehealth practice. For example, evidence has shown that Remote Patient Monitoring (RPM) and e-health medication management interventions, specifically computer-automated modalities, have a large effect size on medication adherence (Hedges' g = 0.92; 95% CI = 0.5–1.33). On the other hand, computerized psychoeducation had a small effect size on knowledge (Hedges' g = 0.37; 95% CI = -0.07 to 0.80).

Beebe *et al*. (2014)[9] found that appropriate clinical decision making in tele-mental health nursing is crucial for optimal use and examining the intervention's effects in the right duration of time. They conducted a study that showed adding text messages to the Telephone Intervention Problem Solving (TIPS) produced small gains in symptom reduction and increased medication adherence. The medication adherence over 3 months was 84.3% in the TIPS plus text group and 78.9% in the TIPS only group. Beebe *et al*. (2014)[9] concluded that selecting text messaging, identifying subgroups for whom this intervention might be optimally useful, and examining its effects over a longer time period is necessary. Haregu *et al*. (2015)[12] found that Telephone-Based Therapy (TBT) was not superior to usual care for treatment durations of less than 6 months.

Haregu *et al*. (2015)[12] emphasized the importance of considering whether a tele-mental health intervention is accessible and convenient when making clinical decisions. Their study results indicated that TBT can be applied in settings where the necessary infrastructure is available and where TBT is considered an accessible and convenient method of health service delivery.

Selecting the appropriate intervention type and delivery modality are crucial issues in tele-mental healthcare. Certain modalities, such as telephone, text messaging, and video conferencing, for delivering certain interventions, such as reminders, social support, data feedback, and care team access, may ultimately prove to have advantages over others. For example, Pan *et al*. (2021)[21] suggested that some measurements in e-health, such as biological or direct observations, may provide better results but are costly, inconvenient, and often impractical to implement. They emphasized the importance of better comparisons between accuracy and practicality by novel care systems.

According to some experts, creating standardized and scheduled interventions in e-mental healthcare is recommended.[12,13,18] Advanced directives are documents containing instructions about what actions should be taken in regard to service users' health.[13] They are recognized by law but not legally binding, meaning that healthcare providers and proxies will do their best to respect the service user's wishes, but there may be circumstances in which they cannot follow them

exactly. Uslu *et al*. (2019)[19] proposed a protocol-based telephone-based problem-solving method as a standardized care option for improving the problem-solving abilities of patients with schizophrenia. The TIPS protocol has been developed to address various daily problems of patients with schizophrenia. In their suggested protocol, it is important to conduct face-to-face interviews with patients before starting the e-mental health sessions, and also, over time duration of calls should be shortened. Haregu (2015) suggested that a structured approach with clear outlines of materials in each session followed by therapist manual and a patient workbook should be carefully considered when applying TBT.[12]

Affective aspect in E-professionalism

The systematic review conducted by Van Der Krieke (2014) found that computerized e-mental health communications, feedback, and shared decision-making interventions for self-management of patients with psychosis had small effect sizes on patients' satisfaction (Hedges' g = 0.21, 95% CI = 0.03–0.38). This finding is significant because it indicates that e-mental health interventions for self-management did not always contribute to service user empowerment.[13] This indicates a missed opportunity that developers need to take into account.

Khodadadi (2019) asserted that the motivational nature of text-messaging on timely referral for counseling and continuation of treatment in veterans with Post-Traumatic Stress Disorder (PTSD) has led to improved PTSD symptoms, enhanced quality of life, and reduced frequency of PTSD recurrence in clients.[14] Moghimi (2018) also believed that feeling support by SMS-based consultations in mothers with a mentally retarded child may increase mothers' resiliency and decrease their stress.[15]

Nagel (2016) suggested that the experiences of nurses with patients in telehealth highlight the "imaginative construction of care" and the development of new communication skills to foster presence and support despite a sense of uncertainty given an absence of physical presence.[16] Nagel suggested that nurses should attempt to construct a space with the user of remote care where an image of the context and the user replaces the physical space. This requires an intentional act of care that goes beyond just knowledge and skills. While nonverbal cues and touch are important aspects of communication, these aspects are diminished or lost in the use of telehealth. Therefore, communication skills such as active listening, facilitating conversation, questioning, redirecting, and verifying are becoming increasingly important in telehealth to foster presence and support for the user despite the absence of physical presence.[16]

Uslu *et al*. (2018)[18] found that nurses trained as clinical nurses may face limitations when transferring from direct care to telehealth interventions. Some nurses indicated that they were frustrated and stressed because of patients' absence during the implementation of telenursing, and they had doubts regarding whether telenursing was "real nursing." However, Uslu also revealed that mental telehealth nurses can prevent schizophrenic patients from discontinuing medication willingly and increase their belief in the necessity of medication and medication adherence.

Beebe (2018) highlighted the racial differences in antipsychotic delivery methods (PO or IM) in telehealth care. The study revealed discrepancies in symptom interpretations, help-seeking, and treatment referral, indicating the presence of cultural bias among clinicians.[8] Nagel believed that relational practice is a cornerstone of telehealth. He defined relational practice as having human depth, sensitivity, and compassion when interacting with the user. These characteristics are related to humanistic values and also the cultural competency of health providers.[16]

Emotional intelligence is an important competency for tele-mental health nurses, according to Uslu (2019). Some telehealth interventions were not always conducted at the scheduled time period due to patient-related reasons such as missing the phone call, dead phone battery, forgetting to take the phone, and sleeping at the scheduled time. Therefore, the calls were repeated three times, limited to 3 days in total. Uslu suggested that involving the family and obtaining the contact information from the patient's relatives before discharge and communicating with the relatives can be effective in these cases.[18] This highlights the importance of emotional intelligence in telehealth as nurses need to be able to adapt to unexpected situations and communicate effectively with patients and their families.

Discussion

This systematic review is the first to comprehensively explore the issues and challenges related to digital professionalism in psychiatric mental health nursing. The findings indicate a significant gap in addressing e-professionalism, particularly in the legal and ethical dimensions. The review highlights critical issues such as accuracy, validity, confidentiality, and privacy of health data. These issues are crucial for the effective implementation of digital technologies in mental health care. Given the insufficient attention to these matters, it is clear that electronic health records and other digital tools should be integrated into healthcare systems with careful consideration of these risks to prevent breaches of confidentiality and identity theft and technological failures.[22]

As a result, e-mental health interventions do not always lead to service user empowerment and positive outcomes. This missed opportunity needs to be addressed by developers. The study revealed two competitive scenarios in mental tele-health nursing, and finding the right balance between them is crucial for success. In the Big Brother scenario, e-mental health technology creates a paternalistic paradigm of patient–clinician interaction. The focus is on compliance and monitoring. The aim is to achieve more accurate

monitoring of health and health-related behavior, which can contribute to personalized medicine and the concept of the "quantified self".[13] When the provider's role in the decision-making process is emphasized, the following elements are highlighted as key: consideration of caller needs, data interpretation, and intervention planning.[16]

In the second scenario, e-mental health technology creates a new situation that emphasizes shared decision-making and self-management, leading to greater involvement of service users.[13] In this scenario, the person receiving care is central to the decision-making process, with an emphasis on autonomy, mutual agreement on healthcare goals and strategies, and collaboration between the provider, the person, their family, the interdisciplinary team, and the wider community.[16]

Finally, O'Conner advocates for a formal curriculum to train students in digital professionalism on social media as part of their professional development. He believes that when learners acquire knowledge of digital professionalism, they begin to refine their behavior and skills, changing their privacy settings on social media accounts so that personal information cannot be easily accessed by patients, colleagues, or the public, and appearing more confident when engaging online.[17]

The findings underscore the need for a balanced approach in integrating digital technologies into mental health nursing. Practitioners should be trained to navigate both the paternalistic and collaborative aspects of digital care, ensuring that technology enhances rather than undermines patient autonomy and involvement. The development of formal curricula addressing digital professionalism is crucial. Training should include practical guidelines on managing digital interactions, safeguarding privacy, and ensuring the ethical use of technology.

Educational programs for mental health professionals should emphasize the importance of digital literacy and ethical considerations in telehealth practice. This includes understanding the potential impacts of technology on patient–provider relationships and the necessity of maintaining confidentiality and data security.

Future research should address the current gaps in understanding e-professionalism, particularly focusing on ethics and regulations. There is a need for studies that explore the impact of digital professionalism on patient outcomes and service user empowerment. Research should also investigate the effectiveness of different training programs in improving digital professionalism among mental health practitioners. Additionally, examining the accessibility and feasibility of digital interventions in diverse settings could provide valuable insights into the practical challenges and opportunities of integrating technology into mental health care.

Our review has a number of limitations. The main limitation is the heterogeneity of the studies in terms of methods and results, given the broad dimension of telenursing. Another limitation is the lack of attention to studies on ethics and regulations of e-professionalism. Maybe a publication bias is also likely to exist in this area of research. Apart from the fact that positive results are more likely to be published than negative results, another limitation is that measuring some key variables such as accessibility and feasibility of studies were either not reported or not available.

Conclusion

From our review, it is clear that PMHNs must develop a comprehensive understanding of various aspects of e-mental health practices, including technical knowledge, clinical skills, affective factors, and the ethical and regulatory frameworks governing digital interactions. The complexities and challenges identified in our review highlight that a one-size-fits-all approach to digital professionalism is insufficient. Instead, PMHNs should receive specialized training that addresses these multifaceted issues, ensuring that technology enhances rather than compromises patient care.

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Conflicts of interest

Nothing to declare.

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