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REVIEW

Review of competency-based models and quality standards in training and education in the addiction field

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ABSTRACT

Background: A competent workforce is needed to face the global problem of substance use. Competencies are composed of knowledge, abilities and skills. The aim was to map the competency-based models and quality standards in education and training.

Methods: The papers for the scoping review were obtained by a systematic search of scientific databases, complemented by the gray literature. The 43 papers were examined fully. Papers focusing on medical doctors, nurses, and social work were excluded. The results consist of the information from 19 sources that have been analyzed and clustered according to their main focus.

Results: Experts emphasize the need to establish core competencies. Areas such as assessment, early detection, referral and empathic communication are emerging. Competency-based education is becoming popular for many reasons: to produce globally competitive graduates, to achieve quality and foster deeper learning, and to create a system for the continuous improvement. For the implementation of competency-based education, the cooperation of stakeholders is crucial as well as capacity building.

Conclusions: The results show heterogeneity in terms of competencies, curricula, and standards. The paper responds to gaps and highlights missing standardization processes and implementation practices and emphasizes the importance of international collaboration, support, and networking.

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Competency-based education; competency-based training; quality assurance; quality standards

Introduction

Substance use is a global issue. According to the available data, one in 17 people of working age in the world has used a drug in the last 12 months and the total number of current users rose to 296 million in 2021, which is almost 6% of the world's population aged 15–64. An estimated 39.5 million people experienced drug-related harm in 2021, but only one in five received treatment. The COVID-19 pandemic then had a negative impact on treatment availability and the number of people entering treatment (United Nations Office on Drugs and Crime [UNODC], 2023).

The addiction workforce must respond to new challenges and trends and to the needs of people entering the treatment system or in contact with services. The situation worldwide is changing addiction to pharmaceuticals and the internet/social networking sites has become more widespread. Combined with the high number of people who use in harmful and risky ways or are addicted and the negative consequences that this implies for public health systems, it is clear that there is a need to support the quality training of professionals in the field and to build their capacity to deliver quality care. Although the needs of target groups may differ in many aspects, workers should understand fundamental areas such as the process of the formation and development of addiction, principles for working with clients, the transdisciplinary and multidisciplinary aspects of addictive behavior and treatment, and more. There is a whole range of professionals involved in the field of addictions (addiction specialists, medical doctors, nurses, psychologists, social workers, etc.). Health systems and services can be beneficial and functional when they are available, accessible, acceptable, and high-quality, which also means they are provided by a resilient, skilled, and competent workforce (World Health Organization [WHO], 2016). Education and training opportunities vary considerably from region to region and there is a lack of common criteria and a uniform perspective to set minimum standards and evidence-based practice for addiction education. Addiction studies could be established upon competency models that enable the required skills, knowledge, and practical competencies to be defined (Miovsky et al., 2021).

Competencies (or competences) are defined as a specific function comprising the requisite attitudes, skills, and knowledge (Gruppen et al., 2012; Hoge, Tondora, et al., 2005). A model is a unifying theory or collection of beliefs about what is needed to bring about change (in a particular treatment context, with a particular client, or in an education system) (Hoge, Tondora, et al., 2005; SAMHSA, 2006, 2021). Competency represents the human capability that is required for effective performance (Hoge, Tondora, et al., 2005). Knowledge is understanding the facts, rules, principles,

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guidelines, theories, or processes needed to perform the task and is acquired through learning and experience. A skill can be defined as a capacity to perform mental or physical tasks with a specified outcome and an ability as a demonstrated cognitive or physical capability to successfully perform a task with a wide range of possible outcomes (Hoge, Tondora, et al., 2005).

Since the 1980s, there have been efforts to define the necessary competency models and to provide standards for the unification of practice and for the education of professionals, as well as curricula for university education (Hoge, Paris, et al., 2005; Hoge, Tondora, et al., 2005; Segal et al., 1983).

The scoping review aims to provide an overview of competencies and competency-based models, curricula, and quality standards in the education and training of the addiction workforce in all of the drug demand reduction (DDR) areas.

Methods

To meet the objectives of the scoping review, a systematic analysis of both scientific and nonscientific literature was conducted. The international databases PubMed, EBSCO, Scopus, and Web of Science were searched. The initial intention was to use predefined keywords as set out in a study protocol (Nováková et al., 2023). However, the preliminary search showed that they were defined very broadly and did not provide the desired articles and information. Therefore, the keywords were reduced according to the authors' keywords used in relevant articles, and additional sources were found through suggested similar articles and articles that cited the identified source. Furthermore, the Connected papers tool was used. Then databases were searched using the combination of words "substance use," "addiction," "PWUD," "addictive behavior* AND "curricul*,""competency-based education," "competenc* model*" "competenc*," "quality standards," "qualification standards," "workforce training," "staff training," and "training." In the next step, Google Scholar and Google were used for the search. The search was limited to papers written in English.

The search of the databases generated 204 results. After duplicates and non-relevant sources had been removed, the base file consisted of 112 papers. After the screening of the abstracts, papers that were not related to the field of addictions or did not provide information relevant for this scoping review were excluded ($n = 69$). The base of 43 papers was examined fully and papers specifically focusing on medical doctors ($n = 19$), nurses ($n = 1$), and social work ($n = 4$) were excluded. These topics will be covered in other articles (Zborník et al., 2023). Therefore, the results reflect information from 19 papers obtained through database searches and fivesources that were retrieved from the internet search (Table 1). These were then deeply analyzed and clustered according to their main focus: competencies, curricula/education/training, development, and quality assurance tools such as standards, accreditation, and evaluation.

Results

There is a fairly broad base of resources on competencies and curricula for the addiction workforce. Although the themes across the articles are interlinked and some authors cover more than one topic area, for clarity the results of the scoping review are clustered into three categories that also thematically reflect the main themes of the papers in this area: a) competencies, competency-based models, and workforce development, b) universities, training, and curricula, and c) legislation, regulation, standardization, and support, with the highest proportion of papers being related to competencies.

Competencies, competency models, and workforce development

Competencies, as clusters of skills, abilities, knowledge, and personal characteristics, are in contrast with the traditional job analysis approach, which divides the job requirements into many specific elements. Individual competencies can be organized and combined in competency models that serve as conceptual frameworks or organizing schemes that detail the competencies required for effective performance in a particular position. Competencies can be organized into various categories to facilitate their application, for instance "core" competencies applicable to everyone in a position (particular job, profession, task), "level" competencies (unlicensed/licensed/independent care, clinical supervision), or "family therapy competencies" that apply to everyone providing a particular type of service or intervention (Hoge, Tondora, et al., 2005). Competency models are more focused on what the learner should be able "to do" instead of "to know" in usual learning objectives (Gruppen et al., 2012; Rush et al., 2013). Unlike the "traditional" approach, a competency-based approach is not based on a time limit (e.g., a three-month internship) but the trainees stay in training until they make progress and can move to the next level. In this way, competencies are used for planning and hiring the workforce instead of using job titles and occupational classification (Alberta Health Services, 2016).

The competencies for professionals in addictions reflect the context of the region and the way they are educated and trained. In some regions, professionals are mainly in health and social services (Europe), while in others (the U.S.) care is provided mainly by addiction counselors. SAMHSA published TAP 21, which designs the standard for addiction counseling competencies in the U.S. The document identifies 123 competencies essential to effective practice (21 competencies labeled as transdisciplinary foundations are presented in Table 2). Although these are professional standards and are useful for educational settings, they include the field of counseling, so they do not cover the full spectrum of DDR areas (SAMHSA, 2006). The Centre has also published a set of competencies for clinical supervisors (SAMHSA, 2007).

Martino (2010) discusses the challenges and strategies related to the implementation of evidence-based treatments (EBTs) in addiction counseling. Traditional supervision has shifted toward competency-based approaches, explicitly identifying the knowledge, skills, and values essential for specific EBTs. Direct observation, performance feedback, and coaching are crucial elements. Studies show that intensive supervision improves counselors' ability to deliver EBTs. The article highlights the need for ongoing research in understanding how best to train addiction counselors in EBTs, evaluate their

Table 1. Selected papers by main topic.

Author(s)	Source	Main scope/topic
SAMHSA (2006)	Database	Competencies
Rush et al (2013).	Database	Competencies
Collins et al. (2015)	Database	Competencies
Schulte et al. (2010)	Database	Competencies
Tuohy (2014)	Database	Competencies
Hoge, Paris, et al. (2005)	Database	Competencies
Hoge, Tondora, et al. (2005)	Database	Competencies
Gruppen et al. (2012)	Database	Competencies
SAMHSA (2021)	Internet search	Competencies
SAMHSA (2007)	Internet search	Competencies
Addiction Practitioners' Association Aotearoa-New Zealand (2011)	Internet search	Competencies
Alberta Health Services (2016)	Internet search	Competencies
Miovsky et al. (2021)	Database	Education
Miovský et al. (2019)	Database	Education
Brown et al. (2022)	Database	Education
Kader et al. (2023)	Database	Education
Setiyaningrum et al. (2022)	Database	Education
Chasek and Kawata (2016)	Database	Education/training
ICUDDR (2020)	Database	Education/training
Martino (2010)	Database	Training
Segal et al. (1983)	Database	Training curriculum
Nelson (2017)	Database	Workforce development
WHO (2016)	Internet search	Workforce development
Hagedorn et al. (2012)	Database	Accreditation

performance, and address factors influencing learning and performance. It emphasizes the importance of combining various training methods, including workshops and clinical supervision, to enhance counselor competency in delivering evidence-based interventions. Counselors who receive intensive supervisory input, including both feedback and coaching, exhibit significant improvements in proficiency.

Aziz et al. (2022) assessed counseling competencies and knowledge among counselors ($n = 50$). The findings indicate that most counselors scored a medium-level competency, with efforts to increase competency through further education. However, the majority scored medium or low levels of knowledge, suggesting a need for improvement in understanding the basic requirements of addiction counseling. The study reveals a positive correlation between competency and knowledge and emphasizes the importance of specialized training. High knowledge scores were associated with a background in addiction education (Aziz et al., 2022). For a comprehensive idea of what is included in the term competency, the scheme is shown in Figure 1.

Dapaanz (Addiction Practitioners' Association Aotearoa-New Zealand, 2011) provides an addiction competency framework that outlines four main competency pathways for professionals in the sector: problem gambling practitioner, alcohol and other drug practitioner, smoking cessation worker, and addiction support worker. The framework covers a range of domains presented in Table 2. The competencies outlined in the framework serve as a foundation for professional development, education, and the overall improvement of addiction intervention practices. The competences are defined with great regard to the cultural specificities and characteristics of local communities. Good-quality service needs to be culturally competent. That means workers are not able to provide competent care and interventions without addressing the cultural and linguistic needs of diverse populations (Collins et al., 2015; Hoge, Paris, et al., 2005). Knowledge, skills, and beliefs should enable workers to understand the socio-cultural context and situation of the client. The Addiction Practitioners' Association Aotearoa-New Zealand (2011) pays close attention in their Competency Framework to the cultural diversity of clients, human rights, informed consent, and the right to care and support that meets physical, psychological, intellectual, spiritual, and cultural needs. Professionals should come across as caring and compassionate, empathic, friendly, reliable, accepting, and understanding.

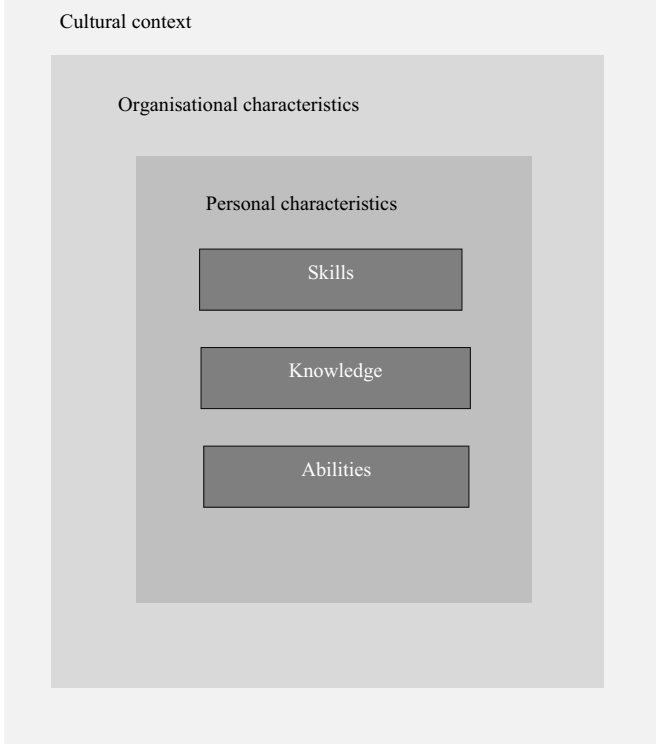

Figure 1. The layers of competency.

Collins et al. (2015) point out the shortage of the mental health workforce in sub-Saharan Africa and the need to expand the range of health professionals capable of providing integrated care. The authors, in collaboration with the Institute of Medicine (IOM) Neuroscience Forum, held a workshop in 2012 with mental health and neurology professionals to define needs in expanding the workforce for services for alcohol-related disorders, depression, psychotic illness, and epilepsy. Competencies were divided into 3 categories presented in Table 2. The competencies focus on knowledge, understanding, and the application of skills. Schulte et al. (2010) focused on the relationship between staff characteristics and the retention rates of clients with dual diagnoses (DD) in outpatient addiction treatment. They highlight the importance of staff training and support, and suggest a positive correlation between staff competency in DD and improved client retention. Not only is this important for the workers and their sense of efficacy, but it especially has a positive impact on the clients themselves and their retention in treatment. Despite high competency ratings, 78% of staff indicated additional support needs in dealing with DD clients.

How do we teach and train the competencies?

The International Consortium of Universities for Drug Demand Reduction (ICUDDR) database contains 689 addiction programmes with wide variability in education and a lack of a common perspective and criteria. This fact has led to the need to define globally agreed addiction-specific curricula and standards, such as the Universal Prevention Curriculum (UPC) and Universal Treatment Curriculum (UTC), which have been developed in collaboration with ISSUP. Although the ICUDDR does not set an uniform set of curriculum requirements, it provides key support for education and training providers. An Implementation Guide (International Consortium of Universities for Drug Demand Reduction [ICUDDR], 2020) that offers universities useful strategies for the development and implementation of substance use prevention and treatment education and training curricula in the academic setting was developed. The guide is designed as a "road map" with checklists to support target groups in planning and management. The Guide includes five stages: a) assessment of needs and preparation, b) adaptation of available curricula such as the UPC and UTC to the academic environment and curriculum development, c) programme implementation, d) ensuring the sustainability of the programme, and e) establishing quality assurance: monitoring, evaluation, and updating activities (ICUDDR, 2020).

Miovský et al. (2019) discuss the development and implementation of comprehensive bachelor's, master's, and doctorate-level curricula in addiction studies (Addictology) at Charles University. The so-called Prague model integrates evidence-based approaches to address substance use, including prevention, treatment, and public health, into a balanced and professionalized discipline. In 2016, the UPC was integrated into the programme. The results highlight the impact of the UPC adaptation on study profiles and competencies, emphasizing the need for a coordinated effort by a qualified team. The study underscores the importance of aligning competencies with the evolving needs of the field and the multidisciplinary nature of addiction studies. It also highlights the diversity in defining and implementing competency models globally, suggesting that such models should be flexible and adaptable to different cultural and educational contexts. The authors also discuss the emergence of international networks, such as the US Society for Prevention Research (SPR) and the European Society for Prevention Research (EUSPR), and their role in supporting collaboration between universities (Miovský et al., 2019).

The 2011 working definition of competency-based education sets out several characteristics of high-quality competency-based education (Sturgis & Casey, 2018). Students should progress on the basis of demonstrated mastery rather than being assessed on the time spent in the course. In this way, they are more engaged and motivated and educators can apply their efforts where learners need the most support. Education based on competency-based models places equal emphasis on academic knowledge, the ability to transfer and apply knowledge in practice, and setting the stage for lifelong learning for which competencies such as a growth mind-set, metacognition, self-regulation, advocacy, social-emotional skills, and achievement orientation need to be developed (Sturgis & Casey, 2018).

Successful implementation models worldwide have some similar features, but the local context and specifics have a significant impact (ICUDDR, 2020). Competency-based education requires a number of processes, including staff recruitment, performance monitoring, quality improvement, and curriculum development. There is a relationship between organizational and individual competencies, and strong leadership and support structures are important for effective teamwork (Rush et al., 2013).

Kader et al. (2023) conducted a study on needs assessment for addiction science programmes at South African universities. They claim that overall, all the programmes aim to accomplish a shared set of goals, including the screening, assessment, treatment, and prevention of substance use disorders (SUDs), although with varying degrees of focus and delivery formats. However, there is a lack of standardized length, content, or duration across different training courses and modules. The majority of the universities (97%, $n = 35$) reported readiness to implement a programme and except one of them, openness to receiving additional support from the ICUDDR. The majority of them also reported that they would benefit from access to the evidence-based UTC and UPC curricula.

In their paper, Miovsky et al. (2021) summarized findings on new trends in addiction education and training programmes at the higher education and university levels. They proposed six types of training, according to the level and degree/certificate attained. The authors distinguish between target candidates/fields (general or specialized studies) and the main scope of the programme and profiles of its graduates. The paper declares that each university and region create its own curricula and there is no unified curriculum in Europe defining the basics of addiction studies. The authors point out the importance of the UPC and UTC curricula and other documents that have emerged from the Colombo Plan and the ICUDDR. Key education and training programmes based

Table 2. Definitions of competencies.

Authors	Area of competency	Competencies
SAMHSA (2006)	Understanding Addiction	Understand a variety of models and theories of addiction and other problems related to substance use.
		Recognize the social, political, economic, and cultural context within which addiction and substance abuse exist, including risk and resiliency factors that characterize individuals and groups and their living environments.
		Describe the behavioral, psychological, physical health, and social effects of psychoactive substances on the person using and significant others.
		Recognize the potential for substance use disorders to mimic a variety of medical and mental health conditions and the potential for medical and mental health conditions to coexist with addiction and substance abuse.
	Treatment knowledge	Describe the philosophies, practices, policies, and outcomes of the most generally accepted and scientifically supported models of treatment, recovery, relapse prevention, and continuing care for addiction and other substance-related problems.
		Recognize the importance of family, social networks, and community systems in the treatment and recovery process.
		Understand the importance of research and outcome data and their application in clinical practice.
		Understand the value of an interdisciplinary approach to addiction treatment.
	Application to Practice	Understand the established diagnostic criteria for substance use disorders, and describe treatment modalities and placement criteria within the continuum of care.
		Describe a variety of helping strategies for reducing the negative effects of substance use, abuse, and dependence.
		Tailor helping strategies and treatment modalities to the client's stage of dependence, change, or recovery
		Provide treatment services appropriate to the personal and cultural identity and language of the client.
		Adapt practice to the range of treatment settings and modalities
		Be familiar with medical and pharmacological resources in the treatment of substance use disorders.
		Understand the variety of insurance and health maintenance options available and the importance of helping clients access those benefits.
		Recognize that crisis may indicate an underlying substance use disorder and may be a window of opportunity for change.
		Understand the need for and the use of methods for measuring treatment outcome.
	Professional Readiness	Understand diverse cultures, and incorporate the relevant needs of culturally diverse groups, as well as people with disabilities, into clinical practice.
		Understand the importance of self-awareness in one's personal, professional, and cultural life.
		Understand the addiction professional's obligations to adhere to ethical and behavioral standards of conduct in the helping relationship.
		Understand the importance of ongoing supervision and continuing education in the delivery of client services.
Martino (2010)	Clinical competencies	Direct observation, performance feedback, coaching.
Dapaanz (Addiction Practitioners' Association Aotearoa-New Zealand, 2011)	Clinical competencies	Assessment, planning, intervention, collaboration, cultural competence, ethical practice.
Collins et al. (2015)	Clinical competencies	Recognition of signs and symptoms, knowledge of the spectrum of mental health disorders, the ability to make timely referrals and knowledge of the network of specialized services in the community, public education and awareness, strengthening community systems of care and linkages to community resources, and providing interventions to clients and their families, empathic communication.
	Screening/identification	Demonstrates awareness of common signs and symptoms.
		Recognizes the potential for risk to self and others.
		Demonstrates basic knowledge of causes.
		Provides the patient and community with awareness and/or education.
		Demonstrates cultural competence.
		Demonstrates knowledge of other mental, neurological, and substance use (MNS) disorders.
	Formal diagnosis/referral to other care	Demonstrates knowledge of when to refer to next level of care/other provider/specialist.
		Demonstrates knowledge of providers for specialized care within the community.
	Treatment/care	Provides support for patients and families while in treatment and care.
		Identifies and assists patients and families in overcoming barriers to successful treatment and recovery (e.g., adherence, stigma, finances, accessibility, access to social support).
		Demonstrates ability to monitor mental status.
		Demonstrates knowledge of how to offer emergency first aid.
		Initiates and/or participates in community-based treatment, care and/or prevention programs.
		Demonstrates knowledge of treatment and care resources in the community.
		Promotes mental health literacy (e.g., to minimize impact of stigma and discrimination).
		Communicates to the public about MNS disorders.
		Monitors for adherence to and/or side effects of medication.
		Practices good therapeutic patient interactions (e.g., communication, relationship, attitude).
		Provides links between patients and community resources.
		Identifies available resources to support patients (e.g., rehabilitation, medication supplies).
		Promotes activities that aim to raise awareness and improve the uptake of interventions and the use of services.
		Protects patients and identifies vulnerabilities (e.g., human rights).
		Demonstrates respect, compassion, and responsiveness to patient needs.
		Demonstrates knowledge and skills to use information technology to improve treatment and care.
Sturgis and Casey (2018)	Life-long learning competencies	Growth mind-set, metacognition, self-regulation, advocacy, social-emotional skills, and achievement orientation.

on these curricula are available in Europe, the USA, Africa, the Philippines, Asia, and Latin America. The paper reflects that addiction studies could be more unified if it were built on competency models that make it possible to define the required skills, knowledge, and practical abilities. For legislators, employers, the workforce, state administrators, and also for clients and the general public, the typology could lead to a reflection on important information about the competencies of specialists working in the field. Although it does not fully address the gaps in addiction training and standards and regional differences, the proposed typology offers potential criteria for setting minimum standards for different academic levels (Miovsky et al., 2021).

The health workforce is of importance in global health (Brown et al., 2022; Ola et al., 2021). It is a pressing issue, particularly in low- and middle-income countries and also those countries where a number of systemic problems are present that lead workers to leave the country. Ola et al. (2021) presented an overview of a proposed curriculum for training being developed for four universities in Nigeria that was based on the UPC and UTC curricula and in collaboration with ISSUP and the ICUDDR, the Beattie model, and others. Several different structural mechanisms are needed to support university addiction education; these include specialized journals, research centers, professional societies, and training and education programmes and institutions (Lososová et al., 2020 In Ola et al., 2021).

Setiyaningrum et al. (2022) reflect on the development of a curriculum management model, the Four D model, for an addiction science study programme in Indonesia. The study successfully follows the 4D development model, ensuring validity and effectiveness. The research outcomes suggest that the curriculum that was developed is essential for enhancing competence in the field of addiction science and emphasizes its potential impact on promotional, preventive, and rehabilitation work in the sphere of addictions.

Law, standards, and quality assurance tools

In some regions, training is designed as specialized addiction programmes following a more generalized bachelor's degree in medicine, psychology, or social work, while in the Czech Republic, for instance, the profession of an "addictologist" is well established. It is a generic programme whose graduates acquire knowledge and skills in all aspects (prevention, treatment and care, harm reduction, science, policy). In the Australian and African educational systems, a professional must complete a defined number of years of experience, undergo relevant education, and then become a registered member of a professional body in order to practise independently (Pavlovská et al., 2018 In Miovsky et al., 2021). European and African programmes target a highly specialized workforce and offer a range of master's and PhD programmes, whereas in the U.S., professionals are mostly educated in undergraduate programmes and receive less graduate education (Pavlovská et al., 2018 In Miovsky et al., 2021). Kader et al. (2023) found an absence of accreditation and certification standards and protocols across universities and programmes (in South Africa) and the authors claim that this might result in graduates having widely different competency levels and no registration as addiction professionals.

Hagedorn et al. (2012) highlight the pressing need for standardized educational requirements in addiction counseling because of the societal impacts of addictive disorders and the lack of preparation standards for counselors. Despite recognition of this need, accrediting bodies in various professions have not prioritized addiction-related standards, leading to unpreparedness among counselors across specializations. Authors claim that the reluctance to establish such standards may stem from factors such as the absence of consensus on diagnostic criteria and the belief that on-the-job training suffices, but they advocate formalized education to ensure consistent competency levels among counselors. They give possible reasons for the lack of standardized education such as the lack of diagnostic criteria for behavioral and process addictions, the lack of consensus on the link between addiction and other phenomena, and the belief that treatment should be provided by "traditional" professions. However, the paper explains that the research shows that diagnostic criteria are being formulated, that addiction has been shown to affect many other aspects of a person's life, and that addiction and the associated difficulties affect the work of many clinicians, regardless of their area of practice.

Chasek and Kawata (2016) investigated the training requirements for addiction counselors across the U.S. with the aim of understanding the landscape and implications for achieving uniform licensure laws. The study, which reviewed 78 programmes, showed disparities in degree requirements, which ranged from three to 124 credit hours, leading to concerns about the consistency and rigor of addiction counseling training. Notably, there is a deficiency in competency-based training, with 44% of programmes offering no clinical training credit hours. The lack of consistency raises questions about the impact on client outcomes and reinforces the call for standardization to advance the addiction counseling field. The article emphasizes the need for advocacy to establish uniform training standards based on accepted accreditation standards to enhance the professionalization of the field. Furthermore, it suggests collaboration among counselors, educators, and organizations to address these issues and promote standardized training for counselors.

Tuohy (2014) highlights the critical need to maintain specific education and training requirements for addiction counseling in the context of behavioral health integration under the U.S. Affordable Care Act. The Association for Addiction Professionals (NAADAC) strongly advocates the preservation of specific education and training, emphasizing the specialized nature of addiction counseling and the importance of a trained workforce. It calls for the maintenance of high standards and accreditation in SUD education, supports standardized certification processes, and urges states to implement licensing laws recognizing addiction-specific competencies. NAADAC emphasizes the link between education, training, and the ability to provide effective and culturally relevant evidence-based practices in addiction treatment and underscores the importance of maintaining standards and accreditation for SUD education through organizations such as the National Addictions Studies Accreditation Commission (NASAC). In 1990, NAADAC

developed a national certification process that required applicants to be state-certified to have an academic degree and pass a national exam. Traditionally, addiction counseling in the U.S. has been based on recovered counselors, and assessment of competencies has been the basis for certification. This was a significant change, because it was the first time that academic degrees had been paired with competencies as a basis for certification, and academic preparation has become an important part of practice (Hoge, Paris, et al., 2005). Work on competencies and competency models is important, but will have little impact on practice unless identified needs are implemented by training and education programmes, certification boards, and licensing agencies (Hoge, Paris, et al., 2005).

Discussion and conclusions

The results presented here clearly show the need to define competencies and competency models. Although a number of initiatives have attempted to do so, there is still a lack of a universal set of competencies, as well as a universally applicable model and standards or other quality assurance tools. However, the authors of the competency models/sets seem to agree on the particular necessary areas or goals, such as assessment/screening/identification/early recognition of the signs and symptoms, planning, intervention, referral to other care/knowledge of the network of specialized services in the community, knowledge of the spectrum of mental health disorders (e.g., dual diagnoses), empathic communication, etc.

Establishing an internationally applicable set of competencies is highly challenging, not only because of cultural differences, but also because of diverse needs in different areas. The requirements for quality assurance tools to be globally applicable add another aspect to the topic.

The competencies are supposed to serve as a foundation for professional development, education, and the overall improvement of intervention practices. The results show the importance of international cooperation, sharing good practice and inspiration, and engaging stakeholders at all levels. In the area of curricula, the UPC and UTC, as a result of the drive toward a universal international minimum curriculum, are proving to be a feasible and hopeful way forward.

Competency-based education, sometimes called mastery-based, proficiency-based, or performance-based, is becoming a popular model for a range of schools and educational institutions. It is approached for many reasons: to produce globally competitive graduates, to create institutions that support the best of what helps students learn, to achieve higher quality and foster deeper learning, and to create a system of continuous improvement (Sturgis & Casey, 2018).

There have been numerous initiatives to define knowledge, attitudes, skills, and core competencies for the workforce in addictions. In the U.S. both federal and non-federal approaches (Hoge, Paris, et al., 2005) had an impact on changes in the curricula in nursing, medicine, psychology, social work, and other related professions. Initially, the activities were focused on a specific discipline, but later they expanded to an interdisciplinary approach. The shift away from education specifically in one discipline was facilitated by the growing interdisciplinary membership and influence of the Association for Medical Education and Research in Substance Abuse (AMERSA). The emergence and undoubtedly important position of addiction specialists as a separate qualification also play a role in there being a shift toward a general base of minimum competencies for the whole addiction workforce, regardless of their background. The Addiction Technology Transfer Center (ATTC) network was established in 1993 by the Center for Substance Abuse Treatment (CSAT) under SAMHSA to enhance the training of addiction treatment professionals. Subsequently, the ATTC National Curriculum Committee was convened to assess curricula and set agenda items for curriculum enhancement (Hoge, Paris, et al., 2005).

Competencies and competency models are usually defined by experts. However, for truly realistic and relevant competencies, it is necessary to complement expert opinions with additional data sources so that competencies are both achievable for students and practitioners and enable effective practice. In addition to defining the competencies themselves, it is similarly important to work on assessment systems that allow their continuous development (Hoge, Paris, et al., 2005). In this aspect, international initiatives that stand behind the publication of standards, curricula, and other materials for standardization and improvement of the quality of practice, such as the ICUDDR, ISSUP, ISAM, SAMHSA, the Global Centre for Credentialing and Certification, and others, have a key role to play (Miovsky et al., 2021; Miovský et al., 2019). It is appropriate to ask who is supposed to actually set the minimum level of workforce and quality requirements so that the criteria can be adopted globally, be consistent with actual practice, and at the same time be flexible enough to respond to changes. It is clear that the topic of competencies for the addiction workforce resonates in professional circles and in practice. Academic education and training play a crucial role in the effective treatment of SUDs. It equips professionals with the essential knowledge, skills, and credibility necessary to deliver high-quality care to clients and drive progress in the field. By integrating science into academic curricula, the goal is to elevate the professionalism of the addiction workforce, ensuring that students and professionals receive comprehensive training at universities aligned with the core competencies required for professionals in practice (Kader et al., 2023). When the quality of care is being evaluated, provider competencies are one of the key factors. For this reason, competencies have a direct effect on the care/treatment processes and the better the competence of the workforce, the better the care provided to the target groups (Hoge, Paris, et al., 2005).

For the implementation of competency-based education, the cooperation of institutions such as universities, relevant funding ministries, and care providers, the development of distance learning and coaching, and supervision opportunities are crucial. Capacity building in monitoring and evaluation is essential (Collins et al., 2015). While competency-based training allows educators to tailor training to the needs of the local context and specify the skills that need to be mastered, there are also concerns that such an approach may be reductionistic and miss the whole in its focus on the specifics.

The scoping review shows great heterogeneity in competencies, curricula, and standards. In particular, the areas of

standardization and quality assurance of education and care are future challenges in the field of addiction. It is clear that the care of clients and their relatives cannot stand on one type of expertise, but requires the collaboration of professionals in the field of physical and mental health. Although each of these professions brings its own paradigms, approaches, and methods, some competencies are applicable to all, given the sociocultural context. Therefore, it is important to define the so-called core competencies. It has become clear that implementation in practice requires significant support from many directions (legislation, funding, professional readiness) and it is obvious how important the role of organizations such as the ICUDDR and ISSUP, which bring together academics and practitioners, is (Miovsky et al., 2021).

Workforce planning is a crucial component of workforce development (Nelson, 2017). It ensures that the service can provide the right work at the right time and has enough professionals with the necessary skills and attitudes at the right costs and with the right work outcomes (Nelson, 2017). Workforce development is a continual process that consists of recruitment and retention, infrastructure development, learning and development, organizational development. and information, research and evaluation. When done right, planning can assist organizations to anticipate change, plan for the future, meet goals, and provide consistent and high-quality care (Nelson, 2017). With the rapid development of competency-based education comes the need for quality assurance. Not all institutions are in line with the philosophy of this approach. Some institutions convert teaching into competency-based models only on a technical level. The culture of an education system is made up of beliefs, values, and attitudes. A competency-based structure will be weakened if it is based on the same beliefs and assumptions as those on which the traditional education system was built.

Although the article has a number of limitations (only English papers were searched, the comparability of sources was challenging, the interpretation of the concept of competence may differ between the individual papers, and only papers on competence in general terms were selected, which may have resulted in the loss of important information in those papers focused on particular professions, such as medicine doctors, nurses, etc.), the paper provides a comprehensive review of existing resources on competencies, competency models, quality standards, and other tools for quality assurance. The authors map existing information on this broad and complex topic, categorize it, and attempt to contribute to filling the gaps in this increasingly important topic.

A number of the papers that were identified emphasize the need to establish clear competencies and a method for verifying their fulfillment. The core competencies can provide a platform upon which context-specific curricula and training activities can be developed, launched, and evaluated in practice. Improvements in global health can be realized through a high-quality, resilient, and constantly improving workforce. The results of the research indicate a lack of standardization processes. Although it is challenging to develop standardization tools in such a broad field that is not unified, quality assurance is an essential part of high-quality education and especially high-quality care. For that, cooperation, examples of good practice, organizational support, networking, and capacity building are needed.

Future research in this area is much needed, as is the development of standards for quality assurance in both education and training and in maintaining and developing competencies in practice.

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