Disability Training for Health Care Providers: Competencies & Delivery Methods

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Background

One in four or approximately 61 million Americans have a disability[1]. As a result, every health care provider will serve individuals with disabilities during their career. The literature suggests that people with disabilities (PWD) are underserved by the health care system and often providers do not have the knowledge or skillset to competently work with individuals with disabilities [2,3,4]. Individuals with disabilities are more likely to report that their health needs are not adequately met and that they experience barriers when attempting to access health care services. People with disabilities are two times more likely than their peers without disabilities to report that their health care providers' skills and equipment failed to meet their needs and they are ten times more likely to report low satisfaction with the health care services they receive [5,6].

Negative Experiences with Health Care Professionals and System

The literature documents negative experiences reported by people with disabilities when engaging with health care providers and systems. People with disabilities have reported physical barriers when attempting to access health care services such as barriers to entering health care offices and inaccessible medical equipment[7]. Inaccessible medical equipment can result in individuals with disabilities receiving fewer preventative services[8]. Communication barriers between individuals with disabilities and their health care provider has led to medical errors and misdiagnosis[9]. Patients with intellectual disabilities report feeling excluded from conversations and decisions about their health care[9,10]. Diagnostic overshadowing has resulted in delayed diagnosis or misdiagnosis of cancer and mental illness among individuals with disabilities[9,11,12].

These barriers may be compounded for individuals with disabilities who are also members of underserved racial/ethnic groups. A scoping review revealed that additional barriers related to race and ethnicity include language, communication, acculturation, mistrust of the medical establishment, and these can exacerbate negative interactions with health care providers[13].

Lack of Confidence and Competence Among Health Care Professionals

Health care professionals express a lack of confidence and limited knowledge and skills when working with individuals with disabilities[14,15]. This has been attributed to a lack of education, training, and exposure to people with disabilities. In a 2017 systematic review on attitudes of health professionals towards people with intellectual disabilities, Pelleboer-Gunnink and colleagues concluded that the stigma some health care professionals expressed towards individuals with intellectual disabilities resulted from a lack of knowledge. Their study revealed

that professionals experienced stress, fear, anxiety, and a lack of confidence when working with people with intellectual disabilities[16].

In 2009 Shakespeare and colleagues published a perspective piece in *The Lancet* calling for educating health professionals about disabilities[17]. In their article the authors made recommendations for training topics to improve health care providers competence when working with people with disabilities. In addition to clinical knowledge, Shakespeare et al. called for providers to be educated about stigma, how to communicate with and relate to people with disabilities without medicalization, the human rights of people with disabilities, and person-centered care.

Continuing education and training for health care professionals may address educational needs that will allow providers to increase access to and improve the quality of their services for PWD. One training program utilized nationally to educate health providers is the web-based Responsive Practices, which will be explored in detail in the next section.

Responsive Practices: Disability Competence Training

Responsive Practices is a recorded training accessible online developed by the New Hampshire Disability and Health Program (DHP). The learning objectives are threefold, (1) increasing knowledge of participants regarding health inequities and disparities experienced by people with disabilities, (2) understanding the barriers experienced by people with disabilities when accessing health care services, and (3) obtaining strategies to deliver responsive care to people with disabilities.

Responsive Practices is delivered using various instructional approaches. Video clips, case studies and personal stories are used to deliver information to students. Multiple examples are provided to help participants learn strategies to mitigate barriers and ensure the care they provide is accessible and person-centered.

Disability competence training for health care providers can improve providers' knowledge and approach to serving people with disabilities [18]. Phillips and colleagues (2021) conducted a mixed methods evaluation of Responsive Practices. This training covered health disparities among people with disabilities, barriers to accessing care and preventative health services, and strategies to improve care for people with disabilities. The training aimed to shift trainees' theoretical framework from a purely medical model to one that is more aligned with the social model perspective and to offer providers actionable strategies to reduce barriers and improve care for individuals with disabilities.

One-hundred and ninety-two individuals participated in the online training and were included in the evaluation. Sixty-two percent of the sample identified as nurses and greater than 80% identified as female and 72.4% identified as White.

Prior to accessing the training, participants answered questions about their conceptions about disabilities and actions health care providers can take to provide competent care for individuals with disabilities. At the end of the training, participants answered the same questions

and in addition, rated the training's effectiveness, format, and utility in their current role. The post-test also sought participant self-assessment on provider motivation to make changes and the knowledge gained from the training about health disparities and barriers experienced by individuals with disabilities when accessing health care services.

The authors findings supported both hypotheses that this training shifted providers theoretical framework to become increasingly aligned to the social model and increased the knowledge of providers of different strategies to alleviate barriers to health care access for people with disabilities. Prior to the training, participants indicated higher intellectual affinity with the medical model. When asked about their conceptualizations of disability, most participants included conceptions from the medical model including diagnoses, mobility limitations, injury, and activities of daily living. Responses that reflect the social model of disability included acknowledgement of communication challenges, the physical environment, and the social environment. The differences between the pre- and post- tests were statistically significant. In addition, participants were more likely to identify action steps to reduce barriers after the training when compared to the pre-test.

In their conclusion, the authors called to better prepare health professionals to work with people with disabilities, to increase access to care, and improve health outcomes. The evaluation of the Responsive Practices program highlights the impact training programs can have on the knowledge of health care providers and increase their confidence to deliver quality health care services to PWDs.

The purpose of this literature review is to synthesize information on peer-reviewed training programs for health care providers by presenting education competencies identified by individuals with disabilities and educators from health disciplines and evaluate training delivery formats.

Methods

Databases searched included: PubMed, Scopus, Web of Science, and Google Scholar. The search included the terms health care provider training, disability, disability competence training. The search was repeated taking into consideration variations of words. The reference sections of retained articles were reviewed to identify additional articles. Articles retained were then searched on Scopus to catch any relevant articles that cited retained articles.

Search Results

The search yielded four review articles and one consensus paper. The peer-reviewed articles were published between 2014-2022. The review articles synthesized evidence in the literature on training needs and interventions developed to prepare health care professionals to work with individuals with disabilities. Hemm, Dagnan and Meyer (2014) published a systematic

review that documented training needs for mainstream healthcare professionals to prepare them to work with individuals with intellectual disabilities. Shakespeare and Kleine's 2015 article is an overview and evaluation of disability education programs for health professionals. Ceglio, Rispoli and Flake (2020) conducted a systematic review of personnel training programs for medical professionals to work with individuals with neurodevelopmental disorders and identified effective training methods.

The Havercamp and colleagues (2021) Delphi study created consensus around disability competencies to educate health professionals. Finally, Rotenberg and colleagues (2022) conducted a synthesis of disability training for health workers to improve knowledge, confidence, self-efficacy, and competence to support people with disabilities. All the articles focused on delivery format, topics of training and evaluation methods.

Disability Competencies

Havercamp and colleagues' recently published Delphi study (2021) surveyed experts between 2016-2018 to create consensus around disability competencies for health care education developed by the Alliance for Disability in Health Care Education[19]. This study is the most comprehensive list of competencies presented in the literature and were developed with people with disabilities. The experts surveyed included people with disabilities, disability advocates, family members of people with disabilities, health professionals and interdisciplinary health educators. The final consensus yielded the following six competencies:

- **Competency 1: Contextual and Conceptual Frameworks on Disability**
  This competency involves presenting disability as a demographic characteristic rather than a negative health outcome and is a conceptual framework that is rooted in human diversity, the lifespan, and environments.

- **Competency 2: Professionalism and Patient-Centered Care**
  This competency involves the mitigation of implicit bias, principles of professionalism, communication, respect, and patient-centered care approaches when interacting with persons with disabilities.

- **Competency 3: Legal Obligations and Responsibilities for Caring for Patients with Disabilities**
  This competency involves learning about accommodations as a civil right, legal requirements for providing care, and covers key legislation such as the Americans with Disabilities Act, Rehabilitation Act, and Social Security Act. Understanding the legal framework of anti-discrimination legislation.

- **Competency 4: Teams and Systems-Based Practice**

The fourth competency involves engaging and working with professionals from different disciplines and learning about the roles of other health care professionals. Interprofessional team-based health care is essential to quality health care for people with disabilities who may receive services from more than one health care provider.

- **Competency 5: Clinical Assessment**
  The fifth competency involves learning about functional status in clinical decision making, coordination in care, and engaging people with disabilities in creating health care plans.

- **Competency 6: Clinical Care Over the Lifespan and During Transitions**
  The final competency ensures that providers are exposed to education about the life course and transitions. Engaging people with disabilities in creating a plan of services and supported decision making related to life course transitions.

Training Formats

The review articles evaluated strategies to present these competencies to health care providers. Strategies to introduce these topics include classroom learning, online learning, experiential learning, and a combination of these formats.

Classroom Learning
Three out of the five review articles focused on training formats. Among the review articles, classroom learning comprising of conventional lectures and seminars were the most used teaching format. Ceglio and colleagues describe classroom learning as video presentations, lectures, group discussion, and role-playing[20]. Role-playing provides students with an opportunity to practice skills related to working with individuals with disabilities in a safe environment and where they can learn how to use alternative communication devices or implement screening tools[20]. Lectures were the most implemented delivery format within the classroom setting[20,21,23]. The findings were inconclusive about whether lectures alone are sufficient for behavior change among participants. However, all the articles recommended didactic instruction paired with experiential learning was recommended to instill knowledge and develop skills[20,21,23].

Rotenberg and colleagues identified 19 studies that invited people with disabilities to give lectures and share their experiences with the health system. Shakespeare and colleagues identified 15 articles that reported on trainings delivered by people with disabilities or their family members[23]. Learning from individuals with lived experience of disabilities produced the most positive evaluation outcomes associated with attitude changes across the articles reviewed[20,21,22,23]. Rotenberg and colleagues also emphasized the benefit of giving students in

health disciplines the opportunity to explore disability in a non-clinical setting and engage with people with disabilities outside of the patient-provider dynamic. This experience improved provider attitudes towards people with disabilities[21].

Online Learning

Web-based learning was also utilized to educate health professionals[20,21,23]. Ceglio and colleagues reported on three studies that used online training exclusively and delivered the content in online lectures and virtual patient modules. Virtual Patients module is a video recording that follows an individual with a neurodevelopmental disability and requires trainee interaction at certain points throughout the module while offering pre-recorded feedback to provider responses. The Virtual Patients program appeared to be a promising practice as it allowed trainees to practice interacting with individuals with disabilities before interacting with real patients and it provides feedback to the participants[20]. Rotenberg reported that online learning was particularly useful when in-person encounters were not possible and that case studies can be used as a tool in online training.

Shakespeare and colleagues acknowledged the usefulness of virtual engagement and evaluated an article that used an online discussion yielded positive feedback from participants (mental health nursing students) who were taught by individuals with disabilities who use mental health services[23].

Experiential Learning

Whether online or in-person, creating opportunities to practice skills and providing feedback can support health care providers and increase their confidence and improve their skills[20,21,22,23]. Shakespeare and colleagues retained 9 articles that relied on service-learning experiences for trainees. Students were placed in schools, community facilities and hospitals and given opportunities to learn by doing and improve interaction skills and increase in understanding the needs of the population[23].

Similarly, Ceglio and colleagues reported on five studies that used experiential learning exclusively. Participants observed families that had members with disabilities and shadowed health care providers or engaged in practices under supervision. This included visits to homes, community agencies, and school visits to special education classrooms. In some studies trainees practiced working with individuals with neurodevelopmental disabilities under the supervision and receiving guidance from a professional.

Shakespeare and team retained twenty-three papers that reported on encounters between health care providers and people with disabilities. These experiences were associated with an increase in comfort with working with people with disabilities[23]. The authors reported that supervised experiential learning opportunities had more impact on knowledge and attitudes than lectures alone.

Shakespeare and colleagues retained nine papers that used clinical experience as a tool to teach about disability. This reflected the importance of introducing disability awareness early in

training. Spending time in clinical settings had a positive impact on participants but did not necessarily lead to changes in attitudes about disability[23].

Although the authors echoed the importance of experiential learning, Shakespeare and colleagues cautioned against simulation exercises. Four articles retained by Shakespeare and colleagues utilized simulation exercises. This is when students "experience" disability. For example, a student might use a wheelchair or walk around while blindfolded. The authors reported that this is not a useful method for training and can be harmful if students learn about disability in individualistic terms without understanding the social, environmental, and economic context that is necessary to understand disability[23].

Combination Format Learning

Trainings that combined multiple formats and allowed participants to apply their knowledge tended to have more successful results than programs that relied solely on lectures or didactic methods of teaching[20,21,22,23]. Most lectures were combined with other formats to allow participants to apply the knowledge gained during lecture. Rotenberg found that participants in combined programs found the content to be more engaging and these programs improved outcomes when compared to programs that used only lecture/didactic based methods.

Length of Training

The reviews by Rotenberg and colleagues and Ceglio and colleagues alluded to the importance of the duration of training. Experiences that provided a sustained opportunity to engage with people with disabilities over an extended period in clinical and other settings (schools, camps, residential settings) allowed providers to practice and develop their skills when working with people with disabilities[20,21]. Ceglio and colleagues reported that the duration of the trainings varied across the studies they retained and ranged from a series of one hour sessions to 2 years however some of the studies they reviewed did not report duration of time[20].

Discussion

There is consensus in the extant literature that offering trainees experiences that allow them to interact with and learn from people with disabilities and their family members is beneficial[20,21,22,23]. The studies that offered these trainings were more successful and resulted in more positive provider attitudes when compared to studies that only offered a lecture component. A limitation within the current literature is that measurement outcomes look at immediate training results and rely on individual self-report. Examining long-term outcomes and patient-reported satisfaction will strengthen evidence for training programs and increase our understanding of competencies and training formats that impact behavior change in health care providers and improve the quality of care they deliver to individuals with disabilities.

Recommendations: Addressing Gaps in Current Provider Training

This review of the literature about disability training for health workers revealed that although there are many trainings for health professionals during their training and over the course of their careers, the most effective trainings were a collaborative experience that featured partnerships with people with disabilities and offered experiential learning opportunities. There exists extensive literature on training programs that address the attitudes of health care providers and increases their knowledge about providing high quality health care services to people with disabilities however the evidence does not correlate knowledge with a change in behavior or improved practices. Based on the review and the gaps in the literature, the following recommendations are made:

(1) Develop training and programs that aligns with the six competencies put forward in the national consensus paper[12].
(2) Encourage institutions of higher education to incorporate disability-related content, incorporate disability frameworks in health curriculum, and offer experiences for students to acquire skills to work with people with disabilities during their training.
(3) Partner with people with disabilities, their family members, and advocates to design and deliver educational content.
(4) Support long-term evaluation of programs already being implemented such as Arie Co-Curricular Project in Michigan, an evidence-based Family Support and Disability Awareness training for medical students.
(5) Expand inter-disciplinary training opportunities that allow trainees the opportunity to engage with professionals from other disciplines and learn about the different roles' health professionals have when working with people with disabilities.

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