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## **Attitudes and Biases of Health Professionals Toward Individuals with Disabilities: An Evidence-Based Practice Project**

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Attitudes and Biases of Health Professionals  
Toward Individuals with Disabilities:  
An Evidence-Based Practice Project

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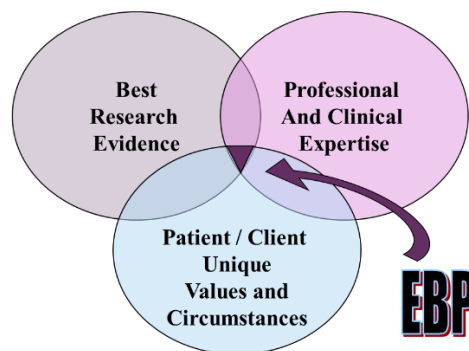
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## Introduction

### Evidence Based Practice

Evidence based practice is defined as the integration of knowledge from professional and clinical expertise, patient/client unique values and circumstances, and best research evidence (Straus, Richardson, Glasziou, & Haynes, 2005). The EBP courses in the St. Catherine University occupational therapy programs emphasizes skill building in finding, analyzing, and synthesizing research.

### A definition of Evidence-Based Practice (EBP)



(Straus, Richardson, Glasziou & Haynes, 2005)



### The EBP Project

Occupational therapy graduate students at St. Catherine University complete an EBP project in partial fulfillment of the requirements for a course on Evidence-Based Practice.

### The EBP Process

- Begins with a practice dilemma
- Dilemma is framed as an EBP question and PICO  
P (population/problem) I (intervention) C (comparison group) O (outcome(s) of interest)
- Background learning
- Search for the best evidence
- Initial appraisal and critical appraisal of the evidence
- Summary of themes from the evidence
- Recommendations for practice
- Next steps – implementation in practice

**Six EBP Projects: Disability and Participation**

1. Environmental barriers to participation
2. Attitudes of health professionals toward individuals with disabilities
3. Perspectives on participation by individuals with disabilities
4. Assessments of participation and environment
5. Interventions and programs that support social and community participation
6. Interventions and programs that support work participation

**EBP Practice Dilemma: Disability and Participation*****EBP Case Related to Disability and Participation***

The overall focus on disability and participation was chosen because of July 26, 2020 was the 30<sup>th</sup> anniversary of the Americans with Disabilities Act (ADA). President George H.W. Bush stated that “The American people have once again given clear expression to our most basic ideals of freedom and equality...[The ADA] promises to open up all aspects of American life to individuals with disabilities -- employment opportunities, government services, public accommodations, transportation, and telecommunications...This legislation is comprehensive because the barriers faced by individuals with disabilities are wide-ranging.” (National Archives, 1990).

Although progress has been made in many areas, there are still substantial barriers to full inclusion for individuals with disabilities. In order to advance full inclusion for individuals with disabilities, occupational therapy practitioners need evidence regarding the needs, opportunities, and barriers that remain. Disability and participation was a particularly challenging topic for the EBP projects for several reasons. First, most of the literature is interdisciplinary and so it required looking for resources outside of occupational therapy for evidence. Second, the literature on disability and participation is still emerging. There are quite a few gaps in research that still need to be addressed. Third, this topic required students to be open to critiques of healthcare and social programs. Six groups of students in the Fall 2020 Evidence-Based Practice course explored a topic related to disability and participation.

***Background Information on Disability and Participation***

An EBP project always begins with background learning on definitions and key characteristics. Disability has been defined as “a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such an impairment, or a person who is perceived by others as having such an impairment” (U.S. Department of Justice, 2020, <https://www.ada.gov/cguide.htm>) and “any condition of the body or mind (impairment) that makes it more difficult for the person with the condition to do certain activities (activity

limitation) and interact with the world around them (participation restrictions)” (Centers for Disease Control and Prevention, 2020). Disability includes impairments associated with vision, movement, thinking, remembering, learning, communicating, hearing, mental health, and social relationships (Centers for Disease Control and Prevention, 2020).

Our understanding of participation is still in the early stages. A basic definition of participation is “involvement in life situations, which includes being autonomous to some extent or being able to control [one's] own life, even if one is not actually doing things themselves” (Perenboom et al., 2003). The characteristics of participation from the perspective of individuals with disabilities include (Hammel et al., 2008):

- Meaningful engagement
- Choice and control
- Access and opportunity
- Personal and social responsibility
- Social inclusion and membership
- Having an impact

Healthy People 2030 has identified health goals for the US population. One goal is to “improve health and well-being in people with disabilities” by “helping people with disabilities get the support and services they need — at home, work, school, and in the health care system” (Office of Disease Prevention and Health Promotion, Office of the Assistant Secretary for Health, Office of the Secretary, U.S. Department of Health and Human Services., 2020).

The American Occupational Therapy Association (AOTA) and other occupational therapy organizations provide general resources on disability and participation. For example, AOTA has special interest sections (e.g., Work and Industry, Rehab and Disability), official documents (e.g., AOTA’s Societal Statement on Livable Communities, 2016), and professional networks (e.g., Network of Occupational Therapy Practitioners with Disabilities and Their Supporters), and special issues of professional journals.

Because most health professions do not have specific educational standards related to disabilities, the Alliance for Disability in Health Care Education proposed six core competency areas that all health professions should address in their curricula (Alliance for Disability in Health Care Education, 2019):

- Contextual and conceptual frameworks on disability
- Professionalism and patient-centered care
- Legal obligations and responsibilities for caring for patients with disabilities
- Teams and systems-based practice
- Clinical assessment
- Clinical care over the lifespan and during transitions

### **Appraisals of Best Evidence, Themes, and Recommendations**

After searching and finding evidence available from library databases and alternative sources, students conducted an initial appraisal to evaluate the quality and relevance of the evidence and select the best research for further review. Then they conducted critical appraisals of the best formal reviews of primary research (e.g., systematic reviews, meta-analyses) and/or primary/original research studies. One of the steps in the CAP process is to evaluate the strength or level of the research design and the types of conclusions that are possible from each design.

#### *Initial Appraisal*

- Quality of the evidence
  - type of evidence and research design
  - investigator qualifications and journal/publication/website
  - journal/publication/website
- Relevance of the evidence

#### *Critical Appraisal*

- Appraisal of methods, results, and implications
- Classification of type of research study
  - Reviews of primary research (e.g., systematic reviews, meta-analyses)
  - Qualitative studies
  - Psychometric studies
  - Primary quantitative research studies
    - Level 1: randomized controlled trials
    - Level 2: two groups, nonrandomized/cohort and case control
    - Level 3: nonrandomized, pretest/posttest and cross-sectional
    - Level 4: single subject
    - Level 5: case report

After completing initial and critical appraisals, themes are summarized related to the EBP question and other findings that emerged from the evidence. Recommendations for practice and reflection on participating in an EBP project are identified in the conclusions.



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**EBP Question**

What are the attitudes and biases of health professionals toward individuals with disabilities and what are the implications for training?

## Executive Summary

### Minnesota Occupational Therapy Association Continuing Education Presentation

**Attitudes and Biases of Health Professionals Toward Individuals with Disabilities**

Kelsey L. Colvin, Kelly J. Eckert, Payton V. Gilreath, Ellen M. Hiestand, Alexandra L. Jendersee, Rachel G. Kullas, Justene N. Martin, Sydney R. McKenzie, and Marissa K. Smith

**EBP Question:**

What are the attitudes and biases of health professionals toward individuals with disabilities and what are the implications for training?

**Background Learning**

- Individuals with disabilities report unmet needs due to negative attitudes of healthcare providers (De Vries McClintock et al., 2016; Lewis & Steinfert-Kroese, 2010).
- Negative attitudes of healthcare professionals are described as the biggest barrier to health services (Tervo & Palmer, 2004).
- Misperceptions and biases of health professionals have significant influences on rehabilitation and intervention outcomes (Tervo & Palmer, 2004; White & Olson, 2012).
- Bias can be **explicit** (conscious attitudes resulting in planned behaviors) or **implicit** (unconscious attitudes resulting in uncalculated behaviors) (VanPuymbrouck et al., 2020).

**Examples of Evidence Resources**

**Governmental and Major Foundations**

- Alliance for Disability in Healthcare Education
- Healthcare workers and the Americans with Disabilities Act

**OT Specific Resources**

- American Occupational Therapy Association
- American Journal of Occupational Therapy

**Interprofessional Journals, Databases, Organizations**

- American Psychological Association
- The ARC Minnesota
- Disability and Health Journal

**Examples of Search Process**

<p><b>Databases Used</b></p> <ul style="list-style-type: none"> <li>• PSYCInfo</li> <li>• PubMed</li> <li>• CINAHL</li> <li>• Google Scholar</li> <li>• OT Search</li> <li>• Web of Science</li> <li>• Cochrane Library</li> </ul> <p><b>Most helpful search strategies</b></p> <ul style="list-style-type: none"> <li>• Filters used:                             <ul style="list-style-type: none"> <li>○ Last 10 years</li> <li>○ Peer-reviewed</li> <li>○ Full-text</li> </ul> </li> </ul>	<p><b>Most helpful keywords</b></p> <ul style="list-style-type: none"> <li>• "Attitudes towards disability" AND "health professionals"</li> <li>• "Attitudes of health care professionals" AND "disability"</li> <li>• "Health professionals" AND "bias towards disability"</li> <li>• "Health professional training" AND "individuals with disabilities"</li> </ul>
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**Initial Appraisal of Best Evidence**

- **Primary Research Studies**
  - 35 articles
- **Reviews of Primary Research**
  - 10 articles
- **Conceptual/Theoretical Articles**
  - 0 articles

Types of Research	Number of Research	Percentage
Primary Research	35	77.8%
Reviews of Research	10	22.2%
Conceptual/Theoretical	0	0%

**Overview of Critical Appraisals of Best Evidence**

**Primary Research Studies**

- **Attitudes toward people with disabilities: A comparison between health care professionals and students** (Jiu & Man, 2006)
- **Explicit and implicit disability attitudes of healthcare providers** (VanPynbroeck et al., 2020)
- **Health professional student attitudes towards people with disability** (Tervo & Pastur, 2006)
- **Health care experiences and perceptions among people with and without disabilities** (De Vries, McClintock et al., 2016)
- **Disabled healthcare professionals' diverse, embodied, and socially embedded experiences** (Bull et al., 2020)
- **Attitudes toward people with disabilities: A comparison of rehabilitation nurses, occupational therapists, and physical therapists** (White & Olson, 2012)
- **Attitudes toward people with disabilities caused by illness or injury: Beyond physical impairment** (Stokich et al., 2011)
- **An investigation of nursing staff attitudes and emotional reactions towards patients with intellectual disability in a general hospital** (Lewin, S., & Starfield-Kroese, B., 2010)
- **Nurses with disabilities working in hospital settings: Attitudes, concerns, and experiences of nurse leaders** (Wood & Marshall, 2010)

**Critical Appraisal 1 and 2**

**Attitudes toward people with disabilities: A comparison between health care professionals and students** (Jiu & Man, 2006)

- **Focus question:** What are the attitudes of healthcare professionals towards people with disabilities based on individual factors such as profession, experience, and self-rated knowledge about disability?
- **Clinical bottom line:** Healthcare professionals who have more contact and education working with people with disabilities have more positive attitudes towards these individuals.

**Explicit and implicit disability attitudes of healthcare providers** (VanPynbroeck et al., 2020)

- **Focus question:** What are the implicit and explicit attitudes of healthcare providers towards individuals with disabilities?
- **Clinical bottom line:** On average, healthcare providers' explicit attitudes were positive, while their implicit attitudes were negative.

**Critical Appraisal 3 and 4**

**Health professional student attitudes towards people with disability** (Tervo & Pastur, 2006)

- **Focus question:** What are healthcare students' attitudes towards people with disabilities and how do they differ between disciplines?
- **Clinical bottom line:** Healthcare students have less positive attitudes towards people with disabilities compared to normative values of nondisabled college students.

**Health care experiences and perceptions among people with and without disabilities** (De Vries, McClintock et al., 2016)

- **Focus question:** What biases do health professionals have toward individuals with disabilities that contribute to negative experiences in healthcare?
- **Clinical bottom line:** Individuals with disabilities identified six themes for negative experiences with health professionals and expressed an emphasis on improving patient-physician interactions to increase overall quality of care.

**Critical Appraisal 5 and 6**

**Disabled healthcare professionals' diverse, embodied, and socially embedded experiences** (Bull et al., 2020)

- **Focus question:** What factors related to having a disability impact the experiences of healthcare professionals or students with disabilities?
- **Clinical bottom line:** The characteristics and dimensions of a disability, including visibility and the time of onset, and the environment, influence the individual and social experiences of being a disabled health professional.

**Attitudes toward people with disabilities: A comparison of rehabilitation nurses, occupational therapists, and physical therapists** (White & Olson, 2012)

- **Focus question:** Is there a difference in attitudes towards people with disabilities when comparing rehabilitation nurses, occupational therapists, and physical therapists?
- **Clinical bottom line:** On average, occupational therapists have more positive attitudes towards people with disabilities than rehabilitation nurses and physical therapists.

**Critical Appraisal 7 and 8**

**Attitudes toward people with disabilities caused by illness or injury: Beyond physical impairment** (Stokich et al., 2011)

- **Focus Question:** Does injury vs illness influence the attitudes of healthcare professionals and students towards individuals with a disability?
- **Clinical Bottom Line:** Both healthcare professionals and students showed more positive attitudes towards individuals who had a disability related to an injury than individuals who had a disability related to an illness.

**An investigation of nursing staff attitudes and emotional reactions towards patients with intellectual disability in a general hospital** (Lewin, S., & Starfield-Kroese, B., 2010)

- **Focus Question:** How do nurses rate their attitudes and emotional reactions to caring for individuals with intellectual or physical disabilities?
- **Clinical Bottom Line:** Nurses held significantly more positive attitudes and emotional responses to working with a client who has a physical disability compared to a client with an intellectual disability.

**Critical Appraisal 9**

**Nurses with disabilities working in hospital settings: Attitudes, concerns, and experiences of nurse leaders** (Wood & Marshall, 2010)

- **Focus Question:** What are the attitudes of nurse supervisors towards nursing staff with disabilities?
- **Clinical Bottom Line:** Despite some concerns about work abilities and public or workplace perceptions of nurses with disabilities, nurse managers were generally confident in the competence of nurses with disabilities and willing to hire others with disabilities. Having previous work experience with nurses who had disabilities was related to more positive attitudes among nurse managers towards nurses with disabilities.

**Theme 1: Differing Attitudes of Healthcare Professionals**

Healthcare professionals' attitudes towards people with disabilities varied based on a wide variety of factors.

- Factors associated with the lowest implicit and explicit biases were younger age, female gender, strong liberal views, contact with someone who has a disability, or having a disability oneself (VanPuymbrouck et al., 2020).
- Type of disability had an impact on attitudes (Lewis & Sterfen-Kroese, 2010; Shioh et al., 2011).
- Nurses and nursing students had less positive attitudes on average than other professions (Au & Man, 2006; Tervo & Palmer, 2004; White & Olson, 2012).
- Healthcare professionals' average explicit and implicit attitudes did not align, as implicit attitudes revealed biases towards people with disabilities and explicit attitudes did not (VanPuymbrouck et al., 2020).

**Theme 2: Influence of Attitudes on Healthcare Experience**

Attitudes of healthcare professionals influence experiences of patients and other healthcare professionals with disabilities.

- Individuals with disabilities described negative experiences with healthcare professionals related to negative attitudes and biases (De Vries McClintock et al., 2016; Lewis & Sterfen-Kroese, 2010; Tervo & Palmer, 2004).
- Healthcare professionals' attitudes influence services and services outcomes (Tervo & Palmer, 2004; White & Olson, 2012; VanPuymbrouck et al., 2020).
- Individuals with disabilities expressed hesitation to disclose disability due to others' negative perceptions and comments (Bak et al., 2020; Miller et al., 2006).

**Theme 3: Limitations of Current Research**

Limitations of current research include self-reporting, potential instrumentation bias, poorly defined terms, and low response rates.

- Self-reports may reflect socially desirable responses (Shioh et al., 2011; Tervo & Palmer, 2004).
- Knowledge of study purpose may increase likelihood of instrumentation bias (Wood & Marshall, 2010).
- Closed ended survey questions may not allow accurate reflection of attitudes (Lewis & Sterfen-Kroese, 2010).
- Inadequate information on types and severity of disabilities limit conclusions and generalizability (Wood & Marshall, 2010).
- Low response rates and narrow recruitment samples limit generalizability (Lewis & Sterfen-Kroese, 2010; Tervo & Palmer, 2004).

**Theme 4: Implications for Training and Education**

Education and training of practitioners are needed to improve attitudes towards individuals and health professionals with disabilities.

- Increased exposure to and/or education of healthcare professionals about disability promoted more positive attitudes (Au & Man, 2006; Haverkamp et al., 2020; Tervo & Palmer, 2004).
- Perceptions of healthcare professionals with disabilities were similarly affected by education and experience levels (Bak et al., 2020; Wood & Marshall, 2010).
- Further development of best practices needed (Alliance for Disability in Health Care Education, 2010; De Vries McClintock et al., 2016; Lewis & Sterfen-Kroese, 2010; Minahan et al., 2001; Shioh et al., 2011; VanPuymbrouck et al., 2020; White & Olson, 2012).

**Recommendations for Occupational Therapy and Interprofessional Programs**

- Incorporate disability competencies into curriculums
- Strengthen experiences with people with disabilities for healthcare professionals and students
- Encourage continuing education surrounding bias and attitudes
- Practice self-reflection about biases and attitudes

**Summary and Reflection**

- Importance of full inclusion participation
- Therapeutic use of self and quality of care
- Self-awareness of implicit and explicit biases
- Experience and continuing education on disability
- Many implications for training, improvements, and future research

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## **Themes**

### ***Introduction***

Four main themes were identified in the literature related to the attitudes and biases of health professionals toward individuals with disabilities and implications for training. The themes were: differing attitudes among healthcare professionals, influence of attitudes on healthcare experience, limitations of the current literature, and implications for further training and education. The research suggests disability training, education, and exposure to people with disabilities can positively influence healthcare students' attitudes. The studies recommend continuing education for all healthcare professionals to reduce bias. Throughout the literature review, it was noted that there are changing norms in regards to the way certain groups of the disability community prefer to be described. For example, deaf and autistic communities tend to utilize identity-first language such as, "deaf person," and, "autistic person," over, "person who is deaf," and, "person with autism." To model this trend, both person-first and identity-first language is used throughout this paper.

### ***Differing Attitudes Among Healthcare Professionals***

Healthcare professionals' attitudes towards people with disabilities vary based on a wide variety of factors. Opinions and attitudes may vary depending on factors such as age, gender, political views, level of education, years of experience, general knowledge of disabilities, as well as level of staff training on disabilities (Shiloh et al., 2011; Tervo & Palmer, 2004; VanPuymbrouck et al., 2020). Factors associated with the lowest implicit and explicit biases in particular included younger age, female gender, strong liberal views, contact with someone who has a disability, or having a disability oneself (VanPuymbrouck et al., 2020). However, the most prominent factors noted in two studies found that the type of disability had more of an impact on

attitudes (Lewis & Stenfert-Kroese, 2010; Shiloh et al., 2011). A full factorial experimental study (N=234) found that health professionals were more likely to exhibit negative attitudes towards people with observable disabilities compared to people with disabilities that could not be seen (Shiloh et al., 2011). Healthcare professionals were also more likely to hold more positive attitudes towards injured persons than persons who are disabled by illness. A cross-sectional study (N=262) discovered there was a tendency to have more negative attitudes towards caring for individuals with intellectual disabilities compared to physical disabilities that were more visible (Lewis & Stenfert-Kroese, 2010).

Professionals of some healthcare disciplines tend to have more positive attitudes towards people with disabilities compared to other disciplines. The attitudes of nurses varied across studies. Several studies found that nurses and nursing students had more negative attitudes on average than other professions (Au & Man, 2006; Tervo & Palmer, 2004; White & Olson, 2012). A review of the literature found explicit attitudes towards disability among nurses and nursing students tended to be less positive compared to other health professionals (Au & Man, 2006; Tervo & Palmer, 2004; White & Olson, 2012). Two cross-sectional survey studies found that nursing students and professionals had significantly lower mean Attitudes Toward Disabled Persons (ATDP) scores than other disciplines including physical therapy, audiology, psychology, speech, and occupational therapy (Au & Man, 2006; Tervo & Palmer, 2004). Occupational therapists tended to have the highest mean attitude scores compared to other professions (Au & Man, 2006; White & Olson, 2012). Other studies in nursing suggest attitude may be more context dependent. The results of an exploratory descriptive study surveying nurse managers' attitudes towards nurses with disabilities (N=219) found that the managers' attitudes were primarily positive towards their staff nurses with disabilities and that the managers were



generally confident in the nurses' competence and job performance (Wood & Marshall, 2010). A cross-sectional study found no significant differences in the average scores within the discipline among nurses, nursing students, and nursing aids (Lewis & Stenfert-Kroese, 2010). Additionally, a comprehensive, cross-sectional study of the implicit and explicit disability attitudes of healthcare professionals (N=25,006) found healthcare providers' conscious and nonconscious attitudes towards people with disabilities did not align (VanPuymbrouck et al., 2020). While a majority of healthcare professionals self-reported not being biased against individuals with disabilities, the implicit attitude scores on the Disability Attitudes Implicit Association Test (DA-IAT) revealed that a large majority of the professionals were biased against disabled people, and therefore preferred nondisabled people (VanPuymbrouck et al., 2020).

### ***Influence of Attitudes on Healthcare Experiences***

Individuals with disabilities have described negative encounters with healthcare professionals. A grounded theory study and a cross-sectional study revealed individuals with disabilities reported unmet needs including inadequate care during visits and feeling diminished in care due to negative attitudes of nurses and other providers (De Vries McClintock et al., 2016; Lewis & Stenfert-Kroese, 2010). Individuals with intellectual disabilities reported being dissatisfied with many aspects of the hospital care they received (Lewis & Stenfert-Kroese, 2010). A cross-sectional survey study found that negative attitudes of healthcare professionals were the biggest barrier to health services for people with disabilities (Tervo & Palmer, 2004).

Negative attitudes, misperceptions, and bias of health professionals may contribute to poor health services and outcomes. Two cross-sectional studies found that attitudes of rehabilitation health professionals had significant influence on the rehabilitation and intervention outcomes of people with disabilities (Tervo & Palmer, 2004; White & Olson, 2012). Health

professional's attitudes influence the way they think and act and patients are able to sense these attitudes which can affect their self-image and self-perception and affect their rehabilitation process and outcomes (White & Olson, 2012). Another cross-sectional study of implicit and explicit disability attitudes of healthcare professionals (N=25,006) found healthcare providers' beliefs and attitudes towards persons with disabilities influenced clinical decision making, referrals, and patient encounters (VanPuymbrouck et al., 2020). The United States Department of Health and Human Services (n.d.) Healthy People 2020 study, as cited in VanPuymbrouck et al. (2020), found that providers' misunderstandings about persons with disabilities contributed to under referrals and disparities in health management strategies.

Healthcare students and professionals with disabilities also report negative experiences associated with the attitudes of other professionals and students. A cross-sectional qualitative study (N=944) on the rates of disclosure of disability among medical students revealed that medical students may not disclose that they have a disability due to the stigma and negative attitudes of others (Miller et al., 2009). This finding was supported by a qualitative, grounded theory study (N=56) looking at the experiences of health professionals with disabilities, many of whom stated they do not disclose their disability in fear of being treated differently because of stigmas in the workplace (Bulk et al., 2020). In multiple cases, individuals did not want to disclose their disability because of negative comments classmates or colleagues made about disabilities (Bulk et al., 2020; Miller et al., 2009). Their hesitation to reveal a diagnosis was also related to the conflicting, stereotypical perceptions of health professionals and disabled persons. As Bulk et al. (2020) stated, health professionals are seen as "healthy" and "autonomous" whereas people with disabilities are thought of as "dependent" and "unpredictable". Participants in both studies reported experiences of others questioning whether they were competent to

complete a health program or provide care as a clinician due to their disability (Bulk et al., 2020; Miller et al., 2009).

### ***Limitations of Current Research***

The limitations of survey research methodology may contribute to multiple forms of bias and have been noted in the limitations section of several studies. Self-report surveys are associated with several forms of bias. A discussion of findings in a cross-sectional study suggested self-reports may indicate socially desirable responses, whether the respondents actually felt that way or not (Tervo & Palmer, 2004). Findings from a full factorial design, suggested self-reports were a limitation. Replication using blind procedures is needed, as healthcare professionals may use self-reports to hide their thoughts about minimizing contact with people with disabilities (Shiloh et al., 2011). A literature review of research on attitudes of healthcare workers toward people with disabilities found there was a large focus in research on calculations of consciously accessible and controllable attitudes, otherwise known as explicit attitudes (Wilson & Scior, 2020). An exploratory descriptive study (N=219) of nurse managers' attitudes towards their staff nurses with disabilities revealed a potential instrumentation bias by the respondents. The nurse managers were aware of the study's purpose and thus could have responded in a way that would be regarded as positive (Wood & Marshall, 2010).

Additional limitations from the current literature include poorly defined terms, the use of predetermined response sets, and low response rates. These limitations were found to influence the outcomes of multiple studies (Lewis & Stenfert-Kroese, 2010; Tervo & Palmer, 2004; Wood & Marshall, 2010). In the cross sectional study (N=262), participant responses were limited by the predetermined set of questions on the survey which may not provide an accurate reflection of attitudes towards individuals with disabilities (Lewis & Stenfert-Kroese, 2010). In the

exploratory descriptive study (N=219), the lack of identification of the types and severity of disabilities limited conclusions about the generalizability of professional attitudes towards specific disabilities (Wood & Marshall, 2010). Multiple cross sectional studies showed that low response rates and narrow recruitment samples were common weaknesses that limited generalizability regarding the attitudes of healthcare professionals (Lewis & Stenfert-Kroese, 2010; Tervo & Palmer, 2004).

### ***Implications for Future Training and Education***

More experience with, exposure to, and/or education about disability leads to more positive attitudes towards people with disabilities among healthcare professionals and students, whether these individuals with disabilities are clients or healthcare workers. One primary survey research study (N=1000) showed that when provided with proper education about disability, healthcare professionals tended to exhibit more positive attitudes towards people with disabilities as rated on the ATDP scale (Au & Man, 2006). Additionally, several cross-sectional studies showed that the more experience individuals across healthcare disciplines had in working or building relationships with individuals with disabilities, the more positive their attitudes were (Havercamp et al., 2020; Tervo & Palmer, 2004). Perceptions of healthcare professionals with disabilities were similarly affected by education and experience levels. Multiple qualitative studies have shown that attitudes towards healthcare professionals with disabilities improved with increased disability education and experience of supervisors and coworkers (Bulk et al., 2020; Wood & Marshall, 2010).

Further research should be done to identify ways to improve patient-physician interactions, educate healthcare providers, change policy initiatives, and incorporate interdisciplinary teamwork. Several studies have concluded that implementing professional

competency standards and standards of care are beneficial to improve patient-physician interactions and perceptions related to individuals with disabilities (Alliance for Disability in Health Care Education, 2019; De Vries McClintock et al., 2016; Minihan et al., 2001). Findings from specific studies on the attitudes of health professionals may provide direction for development of training programs. Several qualitative studies focused on the impacts of healthcare experiences on individuals with disabilities suggested that health professionals need to be educated on competency standards, changes in policy initiatives, and how to incorporate community outreach programs to potentially decrease stereotypical assumptions and bias that healthcare workers have toward individuals with disabilities (De Vries McClintock et al., 2016; VanPuymbrouck et al., 2020). White and Olson (2012) found that having a collaborative dialogue between nurses, physical therapists and occupational therapists about their philosophy and attitudes towards individuals with disabilities shows evidence to support improvement of patient care across professions. A full factorial experimental study (N=234) of attitudes toward disability by health professionals concluded that training should be implemented in healthcare curriculums to increase healthcare students' and professionals' self-awareness of their implicit attitudes towards injured and ill patients (Shiloh et al., 2011). A cross sectional design (N=262) of nurses' attitudes towards caring for individuals with a disability provides implications for further research with a focus on educating and training nursing staff to improve attitudes towards individuals with disabilities (Lewis & Stenfert-Kroese, 2010).

### **Summary and Implications for Practice**

While exploring health professionals' attitudes towards individuals with disabilities and the implications for attitude training, we discovered a number of notable trends. Surprisingly, the research suggests that many healthcare professionals have negative attitudes towards disabled people. This finding was prevalent in studies of nursing professionals and students and was also associated with other characteristics, such as age, gender, and type of disability. Additionally, while many professionals' explicit attitudes towards disabled people were positive, their implicit attitudes revealed an unconscious preference for nondisabled people. Unfortunately, both types of negative attitudes of healthcare professionals are associated with poorer quality of care received by people with disabilities. Other studies found biases toward healthcare professionals with disabilities, which may contribute to unfavorable work conditions. Evidence suggests these prejudicial attitudes are related to a lack of exposure to people with disabilities and a lack of training or education on working with disabled people. Therefore, in order to eliminate disparities in care among the population of people with disabilities and feelings of marginalization among professionals with disabilities, it is recommended that educational and professional programs emphasize disability training and experience working with individuals with disabilities. Specifically, all healthcare professional programs should incorporate disability competencies into their curriculum. All programs should also strengthen quality and quantity of experiences with individuals with disabilities. Lastly, for healthcare professionals in the field there should be continuing education on bias and attitudes towards people with disabilities. Hopefully, these changes would result in people with disabilities receiving the best quality of care possible.

For occupational therapy students to be accepted into an entry level program, it is strongly encouraged that they have experience with or exposure to the disability community. Disability studies are important in occupational therapy because we believe individuals with disabilities have rights for full inclusion and participation in everyday life activities. Given this information, occupational therapists tend to have in-depth background knowledge and familiarity working with individuals with disabilities, and their attitudes toward individuals with disabilities tend to be very positive. The findings from the studies we reviewed suggest that some health professions may not have this lens on disability or adequately address disability perspectives in their educational programs. This means that even though various professions play an essential role in the care of individuals with disabilities, they may be missing a key component of understanding how their attitudes and biases may impact their ability to provide adequate care for those individuals. Healthcare professionals need to increase self-awareness of potential implicit attitudes toward the disability community and seek out advanced training to see a decrease in such biases. Furthermore, the attitudes and biases of healthcare workers may influence the quality of care a person receives. Misperceptions and social stigma toward the disability community affect more than just the feelings of individuals with disabilities but also their safety, well-being, and their way of life.

Strengths of the current evidence included the use of reliable measures, appropriate research designs, surveying multiple disciplines and disabilities, and up-to-date research. Several studies that used the Attitudes Toward Disabled Persons (ATDP) and qualitative measures, found strong evidence that negative attitudes toward disability still exist in the health professions and have an impact on disabled persons. Another strength of the current evidence is that disciplines across healthcare have been included. Researchers surveyed nurses, clinicians,

occupational therapists, physical therapists, social workers, students in health programs, and others, so the research was not limited to one profession. This was also true for types of disabilities, as studies focused on physical and intellectual disabilities, as well as factors like visibility and cause. In addition, the literature includes studies that examine the attitudes towards clients with disabilities as well as health workers with disabilities. Lastly, most of the studies we examined were conducted within the last ten years. A few studies were even published within this past year, supporting the findings that negative attitudes toward disabilities are still prevalent in healthcare.

Research methodology was noted as a limitation in many research studies. These limitations include bias, poorly defined terminology, limited survey questions, and low response rates. Multiple forms of bias were identified in the current literature including self report and instrumentation bias, which may result in an inaccurate representation of professional attitudes. These limitations need to be considered when inferring generalizability of the results as poorly defined terminology, limited survey questions, and low response rates may influence the outcomes of the studies and may not be an accurate representation of the attitudes and biases of healthcare professionals.

The amount of education a healthcare professional receives has been found to influence their attitudes and bias towards individuals with disabilities. Several of the studies we looked at cited that more education is associated with professionals having more positive attitudes towards individuals with disabilities. It is important for colleges and universities with healthcare programs to incorporate education on care for individuals with disabilities into their courses, as well as educate their students on implicit and explicit bias and how to help reduce them. Healthcare professionals must continue education throughout their career. Continuing education



can help professionals stay informed with current practices within their field and enhance patient care. Healthcare employers should provide more opportunities for continued education and training on patient care to improve care outcomes.

Policy must reflect proper regulations of disability training for healthcare professionals in order to promote consistently high-quality care for these individuals. Based on the Americans with Disabilities Act of 1990, further policies should be implemented to establish up-to-date, evidence-based curriculum and standards of care surrounding disability at university health programs as well as in continuing education courses for professionals. Regular evaluation of this curriculum should also occur to test educational quality. By educating a broader audience of healthcare professionals, these policies can address the reduced quality of care individuals with disabilities receive through upstream solutions.

It is important that future research on this topic continues to explore the current attitudes of health professionals towards disability. While we feel that a lot of improvement has been made in regards to the stigma around individuals with disabilities, there is still a long way to go. Further research could also continue to focus on what kind of training for healthcare students and professionals may contribute to more positive and less stigmatizing attitudes towards disability. Additional research could also be conducted surrounding implicit versus explicit attitudes towards disabled persons. It may also be useful to investigate how one's culture may impact their attitudes towards individuals with disabilities.

As practitioners, it is important that we are aware of our own biases and the biases that exist among other health professionals. Steps should be taken to implement more training programs for working with individuals with disabilities, and we should encourage healthcare

students to find frequent opportunities to engage with disabled persons, as these have been shown to potentially lead to more positive attitudes.

### Tables of EBP Resources

Table 1.

*Governmental and Major Foundation Resources that Address Disability and Participation*

Title/Name	Brief Description	Source
Alliance for Disability in Health Care Education	Non-profit organization of medical school faculty, nursing school faculty, and other health care educators working together to include disability-related training programs into health care. Mission is to promote the inclusion of disability-related theory, research, and clinical learning experiences in health care training.	Alliance for Disability in Health Care Education <a href="http://www.adhce.org/">http://www.adhce.org/</a>
The Collaborative on Health Reform and Independent Living	Group consisted of a group of academic researchers and disability advocates committed to responsive public policies for people with disabilities. Mission: Provide stakeholders with accurate, current, accessible and actionable information on how policy affects community living/participation for working-age adults with disabilities.	The Collaborative on Health Reform and Independent Living <a href="https://www.chril.org/">https://www.chril.org/</a>
Common Barriers to Participation Experienced by People with Disabilities	WHO describes barriers as being more than just physical obstacles. Policy barriers deny access to programs, benefits, and services. Programmatic barriers limit effective delivery of public health and healthcare including lack of accessible equipment, little to no communication, as well as providers attitudes, knowledge, and understanding of disabilities.	Common Barriers to Participation Experienced by People with Disabilities <a href="https://www.cdc.gov/ncbddd/disabilityandhealth/disability-barriers.html">https://www.cdc.gov/ncbddd/disabilityandhealth/disability-barriers.html</a>
Health Care Workers and the Americans with Disabilities Act	Provides information for job applicants and employees in the healthcare field who have disabilities. Discusses misperception that healthcare workers must be free of physical or mental impairments.	U.S. Equal Employment Opportunity Commission <a href="https://www.eeoc.gov/laws/guidance/health-care-workers-and-americans-disabilities-act">https://www.eeoc.gov/laws/guidance/health-care-workers-and-americans-disabilities-act</a>
Information and Technical Assistance on the Americans with Disabilities Act	Provides information on ADA and discusses specifically for people working in healthcare.	ADA.gov- United States Department of Justice Civil Rights Division <a href="https://www.ada.gov/ind ex.html">https://www.ada.gov/ind ex.html</a>

Table 2.

*Occupational Therapy Resources that Address Disability and Participation*

Title/Name	Brief Description	Source
American Occupational Therapy Association	Has a guide to acknowledging the effects of discrimination, stigma, and implicit Bias in OT services, as well as other resources about working with clients who have disabilities.  “Critically Appraised Topic: Evidence for the effectiveness of interventions to reduce internalized stigma”  Comprehensive list of occupational therapy and related journals	AOTA <a href="https://www.aota.org/-/media/Corporate/Files/Practice/Guide-Acknowledging-Impact-Discrimination-Stigma-Implicit-Bias.pdf">https://www.aota.org/-/media/Corporate/Files/Practice/Guide-Acknowledging-Impact-Discrimination-Stigma-Implicit-Bias.pdf</a> <a href="https://www.aota.org/Practice/Mental-Health/Evidence-Based/CAT-MH-Stigma.aspx">https://www.aota.org/Practice/Mental-Health/Evidence-Based/CAT-MH-Stigma.aspx</a> <a href="https://www.aota.org/~media/Corporate/Files/Practice/Researcher/ResearchJournalIndexFINAL.ash">https://www.aota.org/~media/Corporate/Files/Practice/Researcher/ResearchJournalIndexFINAL.ash</a>
American Journal of Occupational Therapy	Peer reviewed journals that examine evidence-based practice and professional issues.	AJOT <a href="https://ajot.aota.org/article.aspx?articleid=2767030">https://ajot.aota.org/article.aspx?articleid=2767030</a>
Network of Occupational Therapy Practitioners with disabilities and supporters	Resource for OT practitioners and students with disabilities. Promotes equal access and inclusion of all people.  “Network of Occupational Therapy Practitioners with Disabilities and Supporters”	NOTPD <a href="http://www.notpd.org">http://www.notpd.org</a> AOTA (NOTPD) <a href="https://www.aota.org/Practice/Management/Multicultural/Cultural-Competency-Tool-Kit/NOTPD.aspx">https://www.aota.org/Practice/Management/Multicultural/Cultural-Competency-Tool-Kit/NOTPD.aspx</a>
Minnesota Occupational Therapy Association	Describes the standards in MN for nondiscrimination among OT practitioners and the need for accessibility at their events.	MOTA <a href="https://www.motafunctionfirst.org/">https://www.motafunctionfirst.org/</a>
OT Search	Database of resources focusing on a wide variety of topics relevant to occupational therapists.	OT Search <a href="http://otsearch.aota.org">http://otsearch.aota.org</a>

Table 3.

*Interdisciplinary Journals, Databases, Professional Associations that Address Disability and Participation*

Title/Name	Brief Description	Source
American Deafness and Rehabilitation Association	Brings together health care professionals from multiple fields to share best practice for individuals who are deaf or hard of hearing. "Goal is to improve the lives of those we serve while growing professionally."	American Deafness and Rehabilitation Association <a href="https://www.adara.org/">https://www.adara.org/</a>
The Arc Minnesota	Provide support and advocacy for individuals with disabilities and work to change public policy to break down barriers associated with negative biases for individuals with disabilities.	The Arc Minnesota <a href="https://arcminnesota.org/">https://arcminnesota.org/</a>
Council of State Administrators of Vocational Rehabilitation	Work under the Rehabilitation Act of 1973 to enhance public programs and partnerships to increase employment, independence, self-sufficiency, and inclusion in the lives of individuals with disabilities.	Council of State Administrators of Vocational Rehabilitation <a href="https://www.csavr.org/">https://www.csavr.org/</a>
American Psychological Association	APA is the top scientific and professional organization in the U.S. regarding psychology. It includes research of clinicians, educators, students, and others. There are a variety of professional journals listed on this website. One of their goals is, "utilizing psychology to make a positive impact on critical societal issues."	American Psychological Association <a href="https://www.apa.org/pubs/journals/resources/find-journal">https://www.apa.org/pubs/journals/resources/find-journal</a>
Canadian Journal of Disability Studies	This journal publishes peer-reviewed journal articles related to disability studies. They use a "range of methodologies and perspectives, values collaborative and cross-disciplinary work, community partnership, and creative approaches."	Canadian Journal of Disability Studies <a href="https://cjds.uwaterloo.ca/index.php/cjds/index">https://cjds.uwaterloo.ca/index.php/cjds/index</a>
American Sociological Association	ASA is a non-profit association that is "dedicated to advancing sociology as a scientific discipline and profession serving the public good." They publish 10 professional journals and magazines and list a variety of interdisciplinary disability studies journals on their website.	American Sociological Association <a href="https://www.asanet.org/communities/sections/disability-and-society/interdisciplinary-disability-studies-journals">https://www.asanet.org/communities/sections/disability-and-society/interdisciplinary-disability-studies-journals</a>
Book: Perspectives on Bias in Medicine	Ch. 6.1: Understanding Disability Bias in Medicine  Talks about biases towards patients and physicians with disabilities.	Book: Perspectives on Bias in Medicine <a href="https://ohiostate.pressbooks.pub/current1/chapter/experiences-of-disability-bias-in-medicine/">https://ohiostate.pressbooks.pub/current1/chapter/experiences-of-disability-bias-in-medicine/</a>
International Association for the Scientific Study of Intellectual and Developmental Disabilities	Goal to develop knowledge & research for people with disabilities & their support systems. Lists journals related to topic, special research interest groups, webinars, newsletters, etc.	International Association for the Scientific Study of Intellectual and Developmental Disabilities <a href="https://www.iassidd.org/">https://www.iassidd.org/</a>

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### Appendix A. Initial Appraisals

	Overview of Article
Type of article	Overall Type: Primary Research Study Specific Type: Mixed-methods
APA Reference	Aaberg, V. A. (2012). A path to greater inclusivity through understanding implicit attitudes toward disability. <i>The Journal of Nursing Education</i> , 51(5), 05–510. <a href="http://dx.doi.org/10.3928/01484834-20120706-02">http://dx.doi.org/10.3928/01484834-20120706-02</a>
Abstract	“Individuals with visible disabilities are underrepresented in nursing and have been denied admission to nursing education and discriminated against based on their disability, although nurse educators have been found to hold positive explicit attitudes toward disabled individuals. This study examines nurse educators’ implicitly held attitudes toward individuals with disabilities through the use of the Disability Attitude Implicit Association Test. Findings demonstrated that nurse educators are strongly biased toward individuals without disabilities (N = 132, D = 0.76, SD = 0.46) and demonstrated a stronger preference than the general population (N = 38,544, D = 0.45, SD = 0.43). Study results suggest the need for a timely critique of the continuing focus on physical abilities as a prerequisite for admission to nursing programs. In addition, faculty in schools of nursing and practicing nurses must engage in discussions of attitudes toward individuals with visible disabilities for the discipline to be more inclusive” (p. 505).
Author	Credentials: PhD, RNC Position and Institution: Associate Professor of Nursing, Seattle Pacific University Publication History in Peer-Reviewed Journals: limited
Publication	Type of publication: scholarly peer-reviewed journal Publisher: Healio Other: Nursing education’s premier journal
Date and Citation History	Date of publication: September 2012 Google Scholar Cited By: 65
Stated Purpose or Research Question	“The purpose of this study was to measure the implicit attitudes of nurse educators toward individuals with visible disabilities by using the Disability Attitude Implicit Association Test (DA-IAT). The research question was ‘What are the implicit attitudes of nursing faculty that influence the admission and subsequent treatment of students with visible disabilities?’” (p. 506).
Author’s Conclusion	“Regardless of the reason for the difference in D scores between the general population and nurse educators, this study reveals a significant amount of bias held by nurse educators against individuals with disabilities and is the first study to document these implicitly held attitudes” (p. 508).
Overall Relevance to your EBP Question	Overall Relevance of Article: Moderate Rationale: This article specifically looks at nurse educators’ attitudes towards people with disabilities and discusses the implications of these attitudes on people with disabilities that want to become healthcare workers.
Overall Quality of Article	Overall Quality of Article: Moderate-Good Rationale: This article is less than ten years old and has been cited a number of times. It uses both qualitative and quantitative data to identify patterns in the research and is from a scholarly peer-reviewed journal.

	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Study (qualitative, quantitative, etc.) Specific Type: Survey research
APA Reference	Au, K.W. & Man, D.W.K. (2006). Attitudes toward people with disabilities: A comparison between health care professionals and students. <i>International Journal of Rehabilitation</i> , 29(2), 155-160. <a href="https://doi.org/10.1097/01.mrr.0000210048.09668.ab">https://doi.org/10.1097/01.mrr.0000210048.09668.ab</a>
Abstract	“The objective of this study was to explore the attitudes of health care professionals and their students towards people in Hong Kong with disabilities. The attitudes of four groups of professionals and students (physiotherapists, occupational therapists, social workers, and nurses) were assessed using the well-documented Attitude Toward Disabled Persons scale through the methodology of mailed questionnaires. Comparisons were made among different groups of students and professionals in order to gain insight into factors affecting their behavior. In this study, 511 students and 489 professionals were selected randomly. The results indicated that the overall mean Attitude Toward Disabled Persons scale score of the respondents was comparatively lower than that of their counterparts in foreign countries. The professionals had a significantly higher attitudinal score than the students. Among the four disciplines, nurses held the least favorable attitudes towards people with disabilities. In addition, their attitudes were less positive than those of the student nurses. On the other hand, social work students had less favorable attitudes than the professional social workers, as well as other types of health care students. The analysis of the data also revealed that the mean Attitude Toward Disabled Persons scale scores for both the occupational therapists and occupational therapy students were above the overall average. Unlike the physiotherapists, the mean Attitude Toward Disabled Persons scale score of the physiotherapy students was below the overall average. In addition, age, year of study, educational level, knowledge, and contact with people with disabilities were significant factors in the attitudes held by the students and professional respondents. The quality of the contact was found to be a dominant factor in affecting the scores on attitude. Thus, recommendations were made to modify the current training curriculum and enhance the quality of services to develop more favorable attitudes towards people with disabilities.” (p.155)
Author	Credentials: Unable to locate Position and Institution: Caritas Lok Ngai Day Activity Centre, Professor at Department of Rehabilitation Sciences, Hong Kong Polytechnic University Publication History in Peer-Reviewed Journals: Moderate
Publication	Type of publication: scholarly peer-reviewed journal Publisher: Rheinstetten: Schindele
Date and Citation History	Date of publication: 2020 Cited By: 150
Stated Purpose or Research Question	“The objective of this study was to explore the attitudes of health care professionals and their students towards people in Hong Kong with disabilities.” (p. 155)
Author’s Conclusion	“The professionals had a significantly higher attitudinal score than the students...age, year of study, educational level, knowledge and contact with people with disabilities were significant factors in the attitudes held by the students and professional respondents.” (p. 155)
Overall Relevance to your EBP Question	Overall Relevance of Article: Good Relevance Rationale: This study is related to the EBP question because it measures the attitudes of healthcare workers towards people with disabilities. This study focuses on Hong Kong, but also provides a comparison of attitudes to counterparts in Western countries.
Overall Quality of Article	Overall Quality of Article: Good Quality Rationale: This author has been a part of lots of well-cited research. The article was published within the last 20 years and in a reputable journal.

	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Study Specific Type: Semi-structured interview
APA Reference	Battalova, A., Bulk, L., Nimmon, L., Hole, R., Krupa, T., Lee, M., Mayer, Y., & Jarus, T. (2020). "I can understand where they're coming from": How clinicians' disability experience shape their interaction with clients. <i>Qualitative Health Research</i> , 30(13), 2064-2076. <a href="https://doi-org/10.1177/1049732320922193">https://doi-org/10.1177/1049732320922193</a>
Abstract	"Students and clinicians with disabilities are underrepresented in the academic health programs and professional clinical settings. Disability studies foregrounds the unique ways of knowing and being that clinicians with disabilities can offer. Based on a larger grounded theory study of the experiences of students and clinicians with disabilities, this article examines the role that clinicians' abilities to draw on their personal experiences of living with a disability have on their interactions with clients. The analysis of semi-structured interviews with 55 students and clinicians with disabilities from different fields contributes to the development of a theory of epistemic connection. The theory is informed by the following three themes: (a) building rapport through understanding, (b) from understanding to advocacy and creative approaches, and (c) between professionalism and disability. The findings emphasize not only the importance of diversifying the health care workforce but also incorporating disability epistemology into the health care culture." (p. 2064)
Author	Credentials: PhD Institution: The University of British Columbia Publication History in Peer-Reviewed Journals: Limited
Publication	Type of publication: scholarly peer-reviewed Publisher: Sage Publications Other: interdisciplinary journal to enhance and further develop understanding of qualitative research
Date and Citation History	Date: 2020 Google Scholar Cited By: 0
Stated Purpose or Research Question	"Research Question 1: How does the personal experience of living with a disability affect the clinician's interactions with clients?" (p. 2067)
Author's Conclusion	"This emerging theory of epistemic connection is reflected in the following themes: building rapport through understanding, from understanding to advocacy and creative approaches, and between profession and disability to help explain some of the processes behind interactions with clients."(p. 2068)
Overall Relevance to EBP Question	Overall Relevance to EBP Question: Moderate This article brought an interesting perspective to the EBP question. It talked about clinicians with disabilities and how their personal experience shape how they interact with their clients. It does lack talking about biases and attitudes.
Overall Quality of Article	Overall Quality of Article: Good Reputable journal and publisher. Article publication this year.

	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Study Specific Type: cross-sectional survey methodology
APA Reference	Breau, G., Baumbusch, J., Thorne, S., Hislop, T. G., & Kazanjian, A. (2019). Primary care providers' attitudes towards individuals with intellectual disability: Associations with experience and demographics. <i>Journal of Intellectual Disabilities</i> . <a href="https://doi.org/10.1177/1744629519860029">https://doi.org/10.1177/1744629519860029</a>
Abstract	“Primary care providers are the main point of contact with the healthcare system for individuals with intellectual disability, and they may have pre-existing attitudes towards this group that impacts care. We examined whether participants’ gender, age, professional status and experience with individuals with intellectual disability were associated with attitudes by surveying 95 family physicians, family medicine trainees and advanced practice nursing students across a Canadian province. Younger participants were more likely to feel that those with intellectual disability are similar to themselves and that individuals with intellectual disability should be empowered to take control of their lives. Older participants were more likely to believe that individuals with intellectual disability are vulnerable. These findings suggest there may be a generational difference in attitudes, and educational interventions may be needed to ameliorate attitudes among older primary care providers to reduce the impact of pre-existing attitudes on the provision of care.” (p. 1)
Author	Credentials: PhD Position and Institution: Collaboration for Outcomes Research and Evaluation, Faculty of Pharmaceutical Sciences at the University of British Columbia Publication History in Peer-Reviewed Journals: Limited
Publication	Type of publication: Scholarly Peer Reviewed Journal Publisher: SAGE journals Other: Journal of Intellectual Disabilities
Date and Citation History	Date of publication: 2019 Cited By: 2
Stated Purpose or Research Question	“The aim of the current study was to determine if primary care providers’ attitudes towards the community inclusion of people with intellectual disability is predicted by participants’ demographic and experience characteristics.” (p. 6)
Author’s Conclusion	“The present study found that age was a key determinant of primary care providers’ attitudes towards people with intellectual disability, as measured by the CLAS-ID. Intriguingly, participants’ previous experience interacting with people with intellectual disability was unrelated to attitudes.” (p.15)
Overall Relevance to your EBP Question	Overall Relevance of Article: Good This study looks at the potential of pre-existing attitudes that healthcare providers have towards individuals with intellectual disability. They examined variables such as gender, age, and experience of the professional and their associated attitudes towards individuals with disabilities.
Overall Quality of Article	Overall Quality of Article: Moderate Publication within the last 5 year. Reputable journal and publisher. Author is not well established. Cited a few times by other authors.

	Overview of Article
Type of article	Overall Type: Primary Research Study Specific Type: “The study design was a prospective, cohort study using self-report questionnaires.” (p. 1544)
APA Reference	Brown, T., Mu, K., Peyton, C., Rodger, S., Stagnitti, K., Hutton, E., Casey, J., Watson, C., Hong, C., Huang, Y., & Wu C. (2009). Occupational therapy students’ attitudes towards individuals with disabilities: A comparison between Australia, Taiwan, the United Kingdom, and the United States. <i>Research in Developmental Disability, 30</i> (6), 1541-1555. <a href="https://doi-org/10.1016/j.ridd.2009.07.020">https://doi-org/10.1016/j.ridd.2009.07.020</a>
Abstract	<p><b>Introduction</b> Students who are enrolled in professional education programs such as occupational therapy may have inherent attitudes towards the future clients they work with. These attitudes may be influenced by the level of their professional education as well as cultural values of their country of origin.</p> <p><b>Purpose</b> The purpose of the study was to examine occupational therapy students’ attitudes towards individuals with disabilities from an international, cross-cultural perspective and to investigate the possible impact of professional education on students’ attitudes.</p> <p><b>Method</b> 485 occupational therapy students from 11 university programs (3 from Australia, 3 from the United Kingdom, 3 from the United States, and 2 from Taiwan) completed the <i>Interactions with Disabled Person’s</i> (IDP) scale.</p> <p><b>Results</b> Significant differences were found between occupational therapy students from Australia, Taiwan, the United States, and the United Kingdom on the following IDP variables: overall attitude towards individuals with disabilities, ‘discomfort’, ‘sympathy’, ‘uncertainty’, ‘coping’, ‘fear’, and ‘vulnerability’. Significant differences between first year students as a total group and final year students as a total group were found on their overall attitudes towards individuals with disabilities, ‘discomfort’, and ‘uncertainty’.</p> <p><b>Conclusion/implications</b> The attitudes towards individuals with disabilities among first year and final year occupational therapy students varies between countries and the students’ year level also impacts on their attitudes towards individuals with a disability.” (p. 1541-1542)</p>
Author	Credentials: PhD, MSc, MPA, BScOT (Hons), OTR, OT (c), MROT, FOTARA, FAOTA Position and Institution: Associate Professor, Department of Occupational Therapy, Monash University Publication History in Peer-Reviewed Journals: extensive
Publication	Type of publication: Peer-reviewed medical journal Publisher: Elsevier Other: Research focus on developmental disabilities and interdisciplinary
Date and Citation History	2009 Google Scholar cited by 37
Stated Purpose or Research Question	“Purpose: The purpose of the study was to examine occupational therapy students’ attitudes towards individuals with disabilities from an international, cross-cultural perspective and to investigate the possible impact of professional education on students’ attitudes” (p. 1542)
Author’s Conclusion	“6. Conclusion ... It appears that the attitudes towards individuals with disabilities among first year and final year occupational therapy students vary from one country to another and that the level of enrolment of an occupational therapy student also impacts on his/her attitudes towards individuals with a disability.” (p. 1554)
Overall Relevance to EBP Question	Overall Relevance to EBP Question: Good Rationale: The article address attitudes towards individuals with disabilities which is what our EBP is asking. It is looking at student and the impact professional education as their attitudes which also helps address how training/education influences attitude/biases toward individuals with disabilities.
Overall Quality of Article	Overall Quality of Article: Moderate Rationale: Reputable journal and publisher. Publication is just past the last 10 years.



	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Study (qualitative, quantitative, etc.) Specific Type: Experimental, thematic analysis
APA Reference	Bu, P., Veloski, J. J., & Ankam, N. S. (2016). Effects of a brief curricular intervention on medical students' attitudes toward people with disabilities in healthcare settings. <i>American Journal of Physical Medicine &amp; Rehabilitation</i> , 95(12), 939–945. <a href="https://doi.org/10.1097/PHM.0000000000000535">https://doi.org/10.1097/PHM.0000000000000535</a>
Abstract	“This study sought to evaluate the effects of a brief curricular intervention on medical students' attitudes toward physical disability in healthcare settings. Students participated in a focused curriculum about people with disabilities (PWDs), which included 2.5 hours of lectures, panel discussions, and video presentations. After the curricular sessions, students were surveyed (n = 237), and their attitudes toward PWDs in healthcare settings were compared with those of students who did not undergo the intervention (n = 251) using the Disability Attitudes in Health Care (DAHC) scale. Thematic analysis of the students' comments regarding the session was performed to supplement the DAHC scale. The intervention group responded with significantly more positive attitudes on 6 of the 17 items on the DAHC scale, and multiple linear regression analysis confirmed the independent effect of the curriculum on higher DAHC scale scores. Female students had more positive attitudes on the survey than did male students, although the effect of the curriculum was independent of gender. Previous experiences with PWDs did not correlate to higher attitude scores. These results suggest that a brief curricular intervention on disability can engender more positive attitudes in medical students toward PWDs.” (p. 939)
Author	Credentials: MD Position and Institution: Psychiatrist, Sidney Kimmel Medical College at Thomas Jefferson University Publication History in Peer-Reviewed Journals: Limited
Publication	Type of publication: Scholarly peer-reviewed journal Publisher: AAP (Association of Academic Physiatrists) Other: American Journal of Physical Medicine & Rehabilitation
Date and Citation History	Date of publication: December 2016 Cited By: 10
Stated Purpose or Research Question	“The purpose of this study was to assess the impact of a brief curricular intervention on students' attitudes toward PWDs in the healthcare setting using the Disability Attitudes in Health Care (DAHC) scale.” (p. 940)
Author's Conclusion	“This study indicates that incorporating only 22 hours of lectures, panels, and video presentations on PWDs throughout the medical school curriculum can have a positive impact on students' attitudes. It also shows that there is still potential for improvement on certain perceptions that medical students have toward PWDs, such as the improvements PWDs can make through treatment.” (p. 944)
Overall Relevance to Your EBP Question	Overall Relevance of Article: Good-Moderate  Rationale: This will be a good article for the focus on the treatment portion of our question as it demonstrates a possible approach to address negative attitudes toward disability. This article gives scores for the participants on the disability attitudes in healthcare survey (DAHC) which could be useful in describing current attitudes.
Overall Quality of Article	Overall Quality of Article: Moderate  Rationale: The author has appropriate credentials and AJPMR is a reliable journal. The information is also recent.

	Overview of Article
Type of article	Overall Type: Primary Research Study (qualitative, quantitative, etc.) Specific Type: In-depth, semi-structured interviews. Grounded theory study
APA Reference	Bulk, L. Y., Tikhonova, J., Gagnon, J. M., Battalova, A., Mayer, Y., Krupa, T., Lee, M., Nimmon, L., & Jarus, T. (2020). Disabled healthcare professionals' diverse, embodied, and socially embedded experiences. <i>Advances in Health Sciences Education</i> , 25(1), 111–129. <a href="https://doi.org/10.1007/s10459-019-09912-6">https://doi.org/10.1007/s10459-019-09912-6</a>
Abstract	“Disabled people are underrepresented within healthcare professions, although their participation has potential benefits for them personally, and for broader society. Disabled peoples' participation in healthcare professions is limited by assumptions about disability. Little research explores how healthcare professions can be organized to support disabled peoples' employment. Within a critical realist paradigm influenced by grounded theory, this study used interviews to explore the experiences of 56 disabled healthcare clinicians and students, and advance a conceptual taxonomy of disability experience within healthcare professions. Participants describe their experiences of disability in the healthcare professional context in terms of characteristics and dimensions of disability—how characteristics interact with factors within healthcare training and practice environments. We profile two particularly salient dimensions of the disability experience: visibility and onset of disability. These are developed to describe complexity and specificity of the experiences of individuals negotiating the healthcare context. Among participants there is extensive heterogeneity related to the experience of disability in healthcare professional contexts. Despite some having similar disability characteristics, no two individuals experience the same combination of characteristics and dimensions of disability. Given the complexity of experiences for disabled healthcare professionals/students, a taxonomy for conceptualizing this experience is presented. Readers are encouraged to consider the taxonomy through which they might conceptualize individual, embodied, and socially embedded experiences of disabled healthcare professionals and students. Stakeholders involved in healthcare professions and education should consider this shift in perspective, with a view to increasing access of disabled people to health professional practice.” (p. 111)
Author	Credentials: PhD Position and Institution: Faculty of Medicine, University of British Columbia, Vancouver, Canada Publication History in Peer-Reviewed Journals: moderate
Publication	Type of publication: Scholarly peer-reviewed journal Publisher: Springer Netherlands Other: <i>Advances in Health Sciences Education</i>
Date and Citation History	Date of publication: September 19, 2019 Cited By: 6
Stated Purpose or Research Question	“The present study addresses the literature's gap by asking what are the social and embodied factors which impact the participation of disabled persons in HP as practitioners or as students?” (p. 113)
Author's Conclusion	“Findings from this study indicate that health professionals characterize their disabilities in various ways, and that the interactions between disability characteristics and the environment lead to diverse experiences of dimensions of disability.” “Disabled students/clinicians have a variety of experiences, and this needs to be recognized in the ways institutions structure their programs and accommodations.” “...enabled staff, faculty, clinicians, and students need to consider how their actions might reflect constricting views of their disabled peers and colleagues.” (p. 128)
Overall Relevance to your EBP Question	Overall Relevance of Article: Good Rationale: This article addresses the firsthand perspectives of people with disabilities who are health professionals and their experiences with biases within the health care system. It utilizes a grounded theory design which allows information to be built upon based on early interviews.
Overall Quality of Article	Overall Quality of Article: Good Rationale: The author has appropriate credentials and publication history. The research is recent and published in a reliable, peer-reviewed journal.

	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Study Specific Type mixed-methods, sequential, explanatory design that includes qualitative descriptive data
APA Reference	Como, D. H., Floríndez, L. I., Tran, C. F., Cermak, S. A., & Stein Duker, L. I. (2019). Examining unconscious bias embedded in provider language regarding children with autism. <i>Nursing &amp; Health Sciences</i> , 22(2), 197–204. <a href="https://doi.org/10.1111/nhs.12617">https://doi.org/10.1111/nhs.12617</a>
Abstract	“In healthcare settings, language used by healthcare providers can influence provider–patient encounters with individuals with autism spectrum disorder, impacting feelings of stigma and marginalization. This study highlights the unconscious biases healthcare providers might have regarding their patients with autism spectrum disorder and how those beliefs are articulated. Seven pediatric dentists participated in two focus groups to describe strategies to improve oral care for children with autism spectrum disorder. While completing the primary analyses, additional codes emerged related to healthcare provider biases; these data are the focus of this study. Three themes were identified: (i) “healthcare microaggressions” describe how healthcare providers portray their patients in subtly negative ways; (ii) “marginalization” denotes the use of exclusionary language identifying children with autism spectrum disorder as different; and (iii) “preconceptions” include comments that highlight biases about patients. The findings provide insight into the implicit biases that might be held by healthcare providers and how they manifest in language. Despite increased emphasis on cultural competency, healthcare providers might unconsciously use language that could negatively impact patient–provider rapport and increase stigma in already marginalized populations. Further research is necessary to explore how these biases could relate to quality of care.” (p. 1)
Author	Credentials: MA, OTR/L, PhD Student Institution: University of Southern California Publication History in Peer-Reviewed Journals: Limited
Publication	Type of publication: Peer-reviewed Publisher: Wiley Other: Reports on original research, systematic and scholarly reviews.
Date and Citation History	Date of publication: 2019 Google Scholar Cited By: 4
Stated Purpose or Research Question	“The purpose of this study was to highlight the unconscious biases that might be held by HCP toward their clients with ASD and explore how those beliefs are expressed in their language.” (p. 1)
Author’s Conclusion	“Self-reflection and training about the importance of language choices used with vulnerable populations might serve to decrease the barriers to care that many encounter as they access healthcare resources. Further research is necessary to clarify what these assumptions mean and how they relate to quality of care and inform practice standards. Additional research is required to elicit consumer perceptions of how HCP biases and assumptions impact patient–provider relationships.” (p. 6)
Overall Relevance to EBP Question	Overall Relevance of Article: Moderate It does look at unconscious biases of healthcare providers but is only looking at those with autism spectrum disorder.
Overall Quality of Article	Overall Quality of Article: Moderate Publication is within 10 years. The study concluded that more research is need to exam how these unconscious biases affect quality of care.

	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Study Specific Type: Cross sectional, correlational-predictive research study
APA Reference	Desroches, M. L., Sethares, K. A., Curtin, C., & Chung, J. (2019). Nurses' attitudes and emotions toward caring for adults with intellectual disabilities: Results of a cross-sectional, correlational-predictive research study. <i>Journal of Applied Research in Intellectual Disabilities</i> , 32(6), 1501– 1513. <a href="https://doi.org/10.1111/jar.12645">https://doi.org/10.1111/jar.12645</a>
Abstract	“Background: Negative healthcare provider attitudes may contribute to healthcare disparities in adults with intellectual disabilities. This study identified predictors of nurses' attitudes and emotions toward caring for adults with intellectual disabilities in the United States. Method: A convenience sample of 248 nurses was used to collect nurses' attitudes and emotions toward caring for adults with intellectual disabilities (Adapted Caring for Adults with Disabilities Questionnaire) and quality of life beliefs (Prognostic Beliefs Scale). Results: Overall, nurses held less positive attitudes toward caring for an adult with intellectual disability versus a physical disability. Intellectual disability nurses held more positive attitudes and emotions and less negative emotions than non-intellectual disability nurses. Quality of life beliefs predicted nurse attitude, positive emotions and negative emotions. The number of adults with intellectual disabilities cared for during the nurse's career predicted negative emotions. Conclusions: Future interventions should focus on improving nurses' understanding of the quality of life of adults with intellectual disabilities.” (Para. 1)
Author	Credentials: PhD Position and Institution: Assistant Professor at the University of Massachusetts Dartmouth Publication History in Peer-Reviewed Journals: Limited
Publication	Type of publication: Scholarly Peer reviewed journal Publisher: WILEY. Other: Journal of Applied Research in Intellectual Disabilities.
Date and Citation History	Date of publication: 2019 Cited By: 4
Stated Purpose or Research Question	“The purpose of this study is to explore the attitudes and emotions of nurses toward caring for adults with intellectual disabilities and to determine if demographic factors, intellectual disability-specific educational training, contact with adults with intellectual disabilities and beliefs about the quality of life of adults with intellectual disabilities affect nurses' attitudes and emotions toward caring for adults with intellectual disabilities.” (Para. 11)
Author's Conclusion	“The results of the study indicate that nurses generally held attitudes trending from neutral to positive toward caring for adults with intellectual disabilities. However, nurses held less positive attitudes and emotions toward caring for an adult with intellectual disability versus a physical disability.” (Para. 47)
Overall Relevance to your EBP Question	Overall Relevance of Article: Moderate This study is related to healthcare professionals, specifically nurses, attitudes towards individuals with a disability. This article specifically evaluated the attitudes of nurses working with individuals who have an intellectual disability, therefore it may be difficult to generalize to health professionals as a whole.
Overall Quality of Article	Overall Quality of Article: Moderate Publication within the last 5 year. Reputable journal. However the author is not well established. Cited a few times by other authors.

	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Study ( <b>qualitative</b> , quantitative, etc.) Specific Type: Focus groups, grounded theory methodology, inclusion of physical and virtual world focus groups
APA Reference	De Vries McClintock, H. F., Barg, F. K., Katz, S. P., Stineman, M. G., Krueger, A., Colletti, P. M., ... & Bogner, H. R. (2016). Health care experiences and perceptions among people with and without disabilities. <i>Disability and Health Journal</i> , 9(1), 74-82. <a href="https://dx.doi.org/10.1016/j.dhjo.2015.08.007">https://dx.doi.org/10.1016/j.dhjo.2015.08.007</a>
Abstract	“Background: Little is known about health care experiences among people with and without disabilities. Objective: We sought to explore perceptions of people with and without disabilities related to their health care experiences. Methods: Nineteen persons with and without disabilities participated in one of four focus groups. Focus groups were conducted in the physical world in Milwaukee, WI and in the virtual world in Second Life with Virtual Ability, a well-established community designed by and for people with a wide range of disabilities. A grounded theory methodology was employed to analyze focus group data. Inclusion of physical and virtual world focus groups enabled people with a wide range of disabilities to participate. Results: While some participants described instances of receiving good care, many discussed numerous barriers. The main themes that emerged in focus groups among both persons with and without disabilities related to their health care experiences including poor coordination among providers; difficulties with insurance, finances, transportation and facilities; short duration of visits with physicians; inadequate information provision; feelings of being diminished and deflated; and self-advocacy as a tool. Transportation was a major concern for persons with disabilities influencing mobility. Persons with disabilities described particularly poignant experiences wherein they felt invisible or were viewed as incompetent. Conclusions: Both persons with and without disabilities experienced challenges in obtaining high quality health care. However, persons with disabilities experienced specific challenges often related to their type of disability. Participants stressed the need for improving health care coordination and the importance of self-advocacy” (p. 74).
Author	Credentials: M.S.P.H., M.S.W., Ph.D. Position and Institution: Department of Family Medicine and Community Health, University of Pennsylvania & Center for Clinical Epidemiology and Biostatistics, University of Pennsylvania Publication History in Peer-Reviewed Journals: extensive (150 articles)
Publication	Type of publication: Research article in a peer reviewed journal Publisher: Elsevier Other: Disability and Health Journal
Date and Citation History	Date of publication: 2016 Cited By: 40
Stated Purpose or Research Question	“Our objective was to explore experiences and perceptions of persons with and without disability related to health care as provided in the physical world” (p. 75).
Author’s Conclusion	“Findings from this study highlight the need for better coordination of care among health care providers as well as improving patient-physician interactions and perceptions related to persons with and without disability” (p. 80). “Developing a national curriculum to train health care providers based on input from consumers of health care services may play a transformative role in improving care” (p. 81).
Overall Relevance to your EBP Question	Overall Relevance of Article: Good Rationale: This article is relevant to our EBP question as it relates to the perceptions that healthcare workers have towards individuals with disabilities. The findings from this article give good insight into how the healthcare systems can be improved to better support individuals with disabilities and the biases that people may have.
Overall Quality of Article	Overall Quality of Article: Good Rationale: I think this article does a good job of providing the perspective of the individuals with disabilities and offers good insight into what some next steps could be. I think that the 6 themes identified were very helpful to gain insight.

	<b>Overview of Article</b>
Type of article	Overall Type: Review of Research Study Specific Type: systematic review
APA Reference	FitzGerald, C., & Hurst, S. (2017). Implicit bias in healthcare professionals: A systematic review. <i>BMC Medical Ethics</i> , 18(19), 1-18. <a href="https://doi.org/10.1186/s12910-017-0179-8">https://doi.org/10.1186/s12910-017-0179-8</a>
Abstract	<p>“Background: Implicit biases involve associations outside conscious awareness that lead to a negative evaluation of a person on the basis of irrelevant characteristics such as race or gender. This review examines the evidence that healthcare professionals display implicit biases towards patients. Methods: PubMed, PsychINFO, PsychARTICLE and CINAHL were searched for peer-reviewed articles published between 1st March 2003 and 31st March 2013. Two reviewers assessed the eligibility of the identified papers based on precise content and quality criteria. The references of eligible papers were examined to identify further eligible studies. Results: Forty two articles were identified as eligible. Seventeen used an implicit measure (Implicit Association Test in fifteen and subliminal priming in two), to test the biases of healthcare professionals. Twenty five articles employed a between-subjects design, using vignettes to examine the influence of patient characteristics on healthcare professionals’ attitudes, diagnoses, and treatment decisions. The second method was included although it does not isolate implicit attitudes because it is recognised by psychologists who specialise in implicit cognition as a way of detecting the possible presence of implicit bias. Twenty seven studies examined racial/ ethnic biases; ten other biases were investigated, including gender, age and weight. Thirty five articles found evidence of implicit bias in healthcare professionals; all the studies that investigated correlations found a significant positive relationship between level of implicit bias and lower quality of care. Discussion: The evidence indicates that healthcare professionals exhibit the same levels of implicit bias as the wider population. The interactions between multiple patient characteristics and between healthcare professional and patient characteristics reveal the complexity of the phenomenon of implicit bias and its influence on clinician-patient interaction. The most convincing studies from our review are those that combine the IAT and a method measuring the quality of treatment in the actual world. Correlational evidence indicates that biases are likely to influence diagnosis and treatment decisions and levels of care in some circumstances and need to be further investigated. Our review also indicates that there may sometimes be a gap between the norm of impartiality and the extent to which it is embraced by healthcare professionals for some of the tested characteristics. Conclusions: Our findings highlight the need for the healthcare profession to address the role of implicit biases in disparities in healthcare. More research in actual care settings and a greater homogeneity in methods employed to test implicit biases in healthcare is needed” (p. 1).</p>
Author	<p>Credentials: PhD Position and Institution: Postdoctoral fellow (on the Swiss National Science Foundation project, ‘Understanding implicit bias in clinical care’) at the University of Geneva Publication History in Peer-Reviewed Journals: limited</p>
Publication	<p>Type of publication: scholarly peer-reviewed journal Publisher: BioMed Central (BMC) Medical Ethics Other: 5-year Impact Factor of 2.88 (2019)</p>
Date and Citation History	<p>Date of publication: March 2017 Google Scholar Cited By: 425</p>
Stated Purpose or Research Question	<p>“Our research question was: do trained healthcare professionals display implicit biases towards certain types of patient?” (p. 3).</p>
Author’s Conclusion	<p>“Our findings highlight the need for the healthcare profession to address the role of implicit biases in disparities in healthcare. In addition to addressing implicit biases, measures need to be taken to raise awareness of the potential conflict between holding negative explicit attitudes towards some patient characteristics, such as obesity, and committing to a norm to treat all patients equally” (p. 15).</p>
Overall Relevance to your EBP Question	<p>Overall Relevance of Article: Moderate Rationale: While this article does address the attitudes and biases of healthcare professionals towards people with disabilities, this is not the primary focus. The article includes studies from around the world and studies that examine the attitudes of healthcare professionals towards other groups as well, such as women and people of color.</p>
Overall Quality of Article	<p>Overall Quality of Article: Good Rationale: This article is only three years old and has already been cited extensively. As a systematic review from a peer-reviewed journal, it provides high quality evidence.</p>

	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Study (qualitative, quantitative, etc.) Specific Type: Survey Research
APA Reference	Havercamp, S.M., Barnhart, W.R., Robinson, A.C., & Whalen Smith, C.N. (2020). What should we teach about disability? National consensus on disability competencies for health care education. <i>Disability and Health Journal</i> , 100989. <a href="https://doi.org/10.1016/j.dhjo.2020.100989">https://doi.org/10.1016/j.dhjo.2020.100989</a>
Abstract	“Background: Health care providers are unprepared to meet the health needs of patients who have disabilities. Disability training is needed, yet there is little agreement about what should be taught. Objective: Establish a national consensus on what healthcare providers across disciplines need to know to provide quality care to patients with all types of disabilities (e.g., mobility, sensory, developmental, mental health). Methods: People with disabilities, disability advocates, family members of people with disabilities, disability and health professionals, and inter-disciplinary health educators systematically evaluated and provided feedback on a draft set of disability competencies. Based on this feedback, competencies were iteratively refined. Results: After two waves of feedback, six competencies, 49 sub-competencies, and 10 principles and values emerged that addressed topics such as respect, person-centered care, and awareness of physical, attitudinal, and communication health care barriers. An overwhelming majority (89%) agreed or strongly agreed that the disability competencies reflected the core understandings needed to provide quality care for patients with disabilities, were relevant across disability types (85%), and across health care disciplines (96%). Averaging evaluative feedback across competencies, participants reported that the competencies were important (98%) and clear (96%). Conclusions: This consensus on what to teach is an important milestone in preparing a disability competent health care workforce. Future directions for research, training, and policy are discussed. When disability is included in health care education, the health care workforce will be prepared to deliver accessible, patient-centered, quality health care to patients with disabilities” (p. 1)
Author	Credentials: PhD Position and Institution: Professor, Healthcare Promotion and Healthcare Parity Program, Nisonger Center Ohio State University Publication History in Peer-Reviewed Journals: Extensive
Publication	Type of publication: scholarly peer-reviewed journal Publisher: Elsevier Other: Official journal of the American Association on Health and Disability
Date and Citation History	Date of publication: 2020 Cited By: 1
Stated Purpose or Research Question	This study was intended to “establish a broad consensus on the core disability competencies for health care education based on input from a diverse group of disability and health stakeholders”. (p. 2)
Author’s Conclusion	“We submit this work hoping that these competencies will guide the development and evaluation of disability content in interprofessional health education.” (p. 8)
Overall Relevance to your EBP Question	Overall Relevance of Article: Moderate Relevance Rationale: This study directly addresses the part of our EBP question that asks what can be done to improve knowledge of disability in healthcare workers and posits that national competencies as evaluated by persons with disabilities are key to improving overall healthcare experience. I rated this article moderately because it is not about attitudes specifically but is still generally relevant. The article fills in the gaps for specific elements of training.
Overall Quality of Article	Overall Quality of Article: Good Quality Rationale: The author is well-established and the article was published by a reputable journal and publisher. It contains very recent information.

	<b>Overview of Article</b>
Type of article	Overall Type: Review of Research Study Specific Type: Systematic Review
APA Reference	Hemm, C., Dagnan, D., & Meyer, T. D. (2015). Identifying Training Needs for Mainstream Healthcare Professionals, to Prepare Them for Working with Individuals with Intellectual Disabilities: A Systematic Review. <i>Journal of Applied Research in Intellectual Disabilities</i> , 28(2), 98–110. <a href="https://doi-org.pearl.stkate.edu/10.1111/jar.12117">https://doi-org.pearl.stkate.edu/10.1111/jar.12117</a>
Abstract	“Background Research suggests there is a high prevalence of physical and mental ill health among individuals with intellectual disabilities and that staff working in mainstream healthcare services lack knowledge, skills and positive attitudes in supporting this client group. This review aimed to locate, extract themes from and evaluate the current literature that had assessed the training needs of mainstream health professionals within this area. <i>Methods</i> This review utilized a mixed-methods approach, with systematic elements used to locate and evaluate the literature ( n = 13) and a narrative approach used to explore patterns and themes identified. The search was completed across four databases, using the search terms felt most likely to capture the relevant literature. <i>Results</i> Three main themes of perceived training need were identified across a range of professional groups: general communication, knowledge/information and profession-specific needs. <i>Conclusions</i> This review highlights the existing themes of training needs as identified by mainstream healthcare staff. It would appear that it may be possible to produce a core training package, suitable across professions with elements that are profession specific and therefore tailored accordingly. Limitations of the literature are explored within this review, as are recommendations for the directions of future research” (p. 98).
Author	Credentials: Cahley Hemm, Doctorate in Clinical Psychology Position and Institution: Newcastle Behavioural Analysis and Intervention Team Publication History in Peer-Reviewed Journals: Limited
Publication	Type of publication: Peer-Reviewed Journal Publisher: John Wiley & Sons Ltd.
Date and Citation History	Date of publication: 2015 Cited By: 50
Stated Purpose or Research Question	“The aims of this review were as follows: 1. To explore the training needs identified by mainstream healthcare staff to support them in working with clients with intellectual disabilities 2. To critically evaluate the literature base. 3. To synthesize the findings of the review in order to consider the implications for identification of training needs, the facilitation of training and future research“ (p. 100).
Author’s Conclusion	“It indicates that developing a core training package that can be implemented across different professional settings is possible and that this could have an important role in increasing the equality in access to and quality of health care for people with intellectual disabilities. It is suggested that further research specifically with GPs is important, since they are often the healthcare professionals who will see clients from a young age, through into adulthood” (p. 109).
Overall Relevance to your EBP Question	Overall Relevance of Article: Good Rationale: This study relates to the aspect of our question pertaining to implications for training health care professionals.
Overall Quality of Article	Overall Quality of Article: Moderate Rationale: Some limitations including inconsistent methodology between included studies, small sample sizes, and unclear reliability and validity of the studies included. Author had very limited publication history, but was cited a fair amount of times.



	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Study (qualitative, quantitative, etc.) Specific Type: Phenomenological
APA Reference	Jarus, T., Bezati, R., Trivett, S., Lee, M., Bulk, L. Y., Battalova, A., ... & Drynan, D. (2020). Professionalism and disabled clinicians: The client's perspective. <i>Disability &amp; Society</i> , 35(7), 1085-1102[2] . <a href="https://doi.org/10.1080/09687599.2019.1669436">https://doi.org/10.1080/09687599.2019.1669436</a>
Abstract	"Disabled individuals are significantly underrepresented as care providers within the healthcare system. One of the institutional barriers are professional competencies established from an ableist viewpoint. We investigated the client's perspectives on the professionalism of disabled clinicians. Focus groups and interviews were conducted with twenty-seven disabled and non-disabled participants. Participants were asked about their expectations and perceptions of professionalism from disabled clinicians. Three themes were identified: Positive impacts - highlighting the benefits of having disabled clinicians; As long as... - suggesting that professionalism should not be impacted provided that certain criteria are met; and to disclosure or not to disclose - providing rationale for and against disclosure of a disability to a client. Results challenge ableist beliefs about what constitutes professional behaviour and suggest that health professions should adopt a non-ableist appreciation for the contributions of disabled clinicians and foster the inclusion of disabled clinicians.: (p. 1085)
Author	Credentials: PhD Position and Institution: Professor, The University of British Columbia, Vancouver, Canada Publication History in Peer-Reviewed Journals: Extensive
Publication	Type of publication: Scholarly peer-reviewed journal Publisher: Taylor & Francis Online
Date and Citation History	Date of publication: 2020 Cited By: 2
Stated Purpose or Research Question	"In this study, the voices of disabled and non-disabled individuals are given the opportunity to express their perceptions of professional competencies of disabled clinicians" (p. 1087)
Author's Conclusion	"In obtaining the client's perspective, this study complements and confirms existing research that disabled clinicians can enhance client-centered practice...This novel exploration of the client perspective may enable the participation of disabled clinicians in health professions by shifting the ableist point of view about what constitutes professionalism, thereby contributing to reducing marginalization from these professions" (p. 1098-1099).
Overall Relevance to your EBP Question	Overall Relevance of Article: Moderate Relevance Rationale: While this study directly addresses attitudes towards health professionals with disabilities, it is from the client's perspective rather than other health professionals. The client perspective is needed to fully understand attitudes towards people with disabilities. However, the article also draws important considerations about shifting ableist perspectives of healthcare workers.
Overall Quality of Article	Overall Quality of Article: Good Rationale: This article was published this year in a reputable journal. The article has been published many times and the study was well-conducted.

	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Study ( <b>qualitative</b> , quantitative, etc.) Specific Type: phenomenological approach, open-ended interviews, themes
APA Reference	Jung, B., Baptiste, S., Dhillon, S., Kravchenko, T., Stewart, D., & Vanderkaay, S. (2014). The experience of student occupational therapists with disabilities in canadian universities. <i>International Journal of Higher Education</i> , 3(1), 146-154. <a href="http://dx.doi.org/10.5430/ijhe.v3n1p146">http://dx.doi.org/10.5430/ijhe.v3n1p146</a>
Abstract	“Background. Canadian health professions strive for inclusivity in practice and it is imperative to extend this philosophy to health science students with disabilities. Purpose. The purpose of this study was to explore the lived experience of student occupational therapists with disabilities enrolled in Canadian universities. Methods. A phenomenological approach was used to conduct fourteen open-ended interviews. Interviews were transcribed and analyzed to develop themes. Findings. Two themes emerged: participants recognizing strengths and needs plus participants navigating the environment. Both themes contain various sub-themes. Implications. Applying relevant practice elements, such as client-centered practice, when working with student occupational therapists with disabilities may facilitate a sense of fit for them within occupational therapy educational programs in Canada” (p. 146).
Author	Credentials: PhD Position and Institution: School of Rehabilitation Science, McMaster University Publication History in Peer-Reviewed Journals: extensive (over 200 articles)
Publication	Type of publication: Peer reviewed journal Publisher: Sciedu Press Other: International Journal of Higher Education
Date and Citation History	Date of publication: February 19, 2014 Cited By: 5
Stated Purpose or Research Question	“The purpose of this study was to explore the lived experience of students with disabilities in occupational therapy programs within Canada by gathering information about their subjective life experiences within academic and clinical environments” (p. 148).
Author’s Conclusion	“Results of this study may provide useful insight in informing the development of inclusive health professional educational programs as specifically illustrated through an exploration of occupational therapy education programs” (p. 153). “In order to facilitate this sense of fit the principles of occupational therapy must be applied in a client-centered manner to student occupational therapists with disabilities” (p. 153).
Overall Relevance to your EBP Question	Overall Relevance of Article: good Rationale: This article gives a good depiction of the insider’s perspective of having a disability and being in the healthcare field. It gives good insight into what some experiences individuals with disabilities have and what biases are toward students with disabilities in the field of OT.
Overall Quality of Article	Overall Quality of Article: good Rationale: The article is from a peer reviewed journal and the authors are very credible as they have been cited in over 200 articles. This article was very concise in the ways they reported their findings and overall themes. They used appropriate methods to collect their data in a qualitative way.

	<b>Overview of Article</b>
Type of article	Overall Type: Primary research Study Specific Type: self-report, vignette style questionnaire survey
APA Reference	Lewis, S., & Stenfert-Kroese, B. (2010). An investigation of nursing staff attitudes and emotional reactions towards patients with intellectual disability in a general hospital setting. <i>Journal of Applied Research in Intellectual Disabilities</i> , 23(4), 355-365. <a href="https://doi.org/10.1111/j.1468-3148.2009.00542.x">https://doi.org/10.1111/j.1468-3148.2009.00542.x</a>
Abstract	“Background It has been suggested that inequalities in health care for people with intellectual disabilities may be partly explained by negative attitudes of health professionals. This study aimed to investigate the attitudes and emotional reactions reported by nursing staff working in general hospitals towards caring for patients with intellectual disabilities. Method Attitudes and emotional reactions were measured using a self-report, vignette style questionnaire, tested for validity and reliability. Attitudes towards patients with physical disabilities were also assessed to act as a comparison. Results Nursing staff reported less positive attitudes, more negative emotions and fewer positive emotions, in response to caring for a patient with an intellectual disability compared to a patient with a physical disability. Occupational status (registered general nurse, student nurse, nursing assistant) had no effect upon respondents reported attitudes or emotions. Finally, attitudinal and emotional variables were significantly correlated, with positive emotions being associated with more favourable attitudes. Conclusions Although caution needs to be exercised when inferring actual behaviour from attitudes expressed, it is suggested that the presence of less positive attitudes and feelings amongst nursing staff towards patients with intellectual disabilities may affect the quality of care. Recommendations for future research and service development includes: the need to focus upon improving attitudes of nursing staff through training, and increased joint working between acute care services and Community Intellectual Disability Teams.” (p.355)
Author	Credentials: Clin.Psy.D Position and Institution: Clinical Psychologist with the British Psychological Society Publication History in Peer-Reviewed Journals: Limited
Publication	Type of publication: Scholarly Peer Reviewed Journal Publisher: Blackwell Publishing Other: Journal of Applied Research in Intellectual Disability
Date and Citation History	Date of publication: 2010 Cited By: 94
Stated Purpose or Research Question	“This study set out to investigate the attitudes and emotional reactions of nursing staff towards caring for patients with intellectual disabilities in a general hospital setting.” (p. 356)
Author’s Conclusion	“Findings from the study demonstrated that nursing staff reported less positive attitudes, a higher occurrence of negative emotions and a lower occurrence of positive emotions when working with a patient with an intellectual disability. An association was also found between self-reported attitudes and emotions, with positive attitudes been associated with positive emotions.” (p.364)
Overall Relevance to your EBP Question	Overall Relevance of Article: Good This study is related to healthcare professionals, specifically nurses, attitudes towards individuals with a disability.
Overall Quality of Article	Overall Quality of Article: Good Publication within the last 10 year. Reputable journal and publisher. Author has been cited a large number of times.

	Overview of Article
Type of article	Overall Type: Primary Research Study (qualitative, quantitative, etc.) Specific Type: Experimental, thematic analysis
APA Reference	Lynch, J., Last, J., Dodd, P., Stancila, D., & Linehan, C. (2019). "Understanding disability": Evaluating a contact-based approach to enhancing attitudes and disability literacy of medical students. <i>Disability and Health Journal</i> , 12(1), 65–71. <a href="https://doi.org/10.1016/j.dhjo.2018.07.007">https://doi.org/10.1016/j.dhjo.2018.07.007</a>
Abstract	<p>“Background: Health disparities and disparities in the provision of healthcare to people with disabilities remains a topic of concern. Research demonstrates that attitudes of healthcare providers contribute to this disparity. The approach to disability education and training in medical school warrants evaluation. Objectives: This study sought to investigate the efficacy of an educational intervention in cultivating positive attitudes towards disability in medical students, and determine the specific impact of an interaction-based hospital visit to patients undergoing neurological rehabilitation. Methods: Web-based questionnaires were distributed to medical students undertaking a 12-week ‘Understanding Disability’ module. Measures of anxiety, attitude, competency and empathy were obtained from 65 students at the beginning (T1), middle (T2) and end (T3) of the module. At T2, approximately half of the students had completed a hospital visit and half had not. Results: Scores changed significantly across all constructs between the beginning and end of the module suggesting a positive overall module effect. Findings confirmed a significant difference in anxiety and empathy levels between the group of students who had completed the visit to the rehabilitation hospital by the middle survey wave and those who had not, indicating a specific placement effect. Conclusions: Our findings suggest that interpersonal contact with individuals with disabilities has a distinct impact on the affective variables of anxiety and empathy. Previous research suggests that this contributes towards improved attitudes to disability. Overall, we provide strong evidence for the inclusion of contact-based educational interventions in medical school to enhance students' attitudes to disability” (p. 65)</p>
Author	<p>Credentials: M.Sc Position and Institution: Researcher, School of Psychology, University College Dublin, Belfield, Ireland Publication History in Peer-Reviewed Journals: Limited</p>
Publication	<p>Type of publication: Scholarly peer-reviewed journal Publisher: Elsevier Other: Disability and Health Journal</p>
Date and Citation History	<p>Date of publication: July 19, 2018 Cited By: 6</p>
Stated Purpose or Research Question	<p>“...this research aimed to evaluate the efficacy of a contact-based intervention grounded in intergroup contact theory that facilitates enhanced attitudes towards people with disabilities, taking into consideration the specific impact, if any, of the visit to the rehabilitation hospital.” (p. 66)</p>
Author’s Conclusion	<p>“Our findings provide robust evidence for a contact-based approach to disability education in medical school...Direct contact with patients with disabilities had a specific impact on medical students' levels of anxiety and empathy.” (p. 70)</p>
Overall Relevance to your EBP Question	<p>Overall Relevance of Article: Moderate Rationale: This article will be relevant for the portion of our question that talks about implications for training. The article demonstrates the impact of their intervention to enhance attitudes and found direct contact with people with disabilities had a positive effect.</p>
Overall Quality of Article	<p>Overall Quality of Article: Moderate Rationale: The author does not seem to have a lot of publication history but does research for a school of psychology. The research date is recent but was only cited by a handful of articles and is based in Ireland.</p>

	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Study (qualitative, quantitative, etc.) Specific Type: cross-sectional, correlational survey
APA Reference	Lyon, L., & Houser, R. (2018). Nurse educator attitudes toward people with disabilities. <i>Nursing Education Perspectives</i> , 39(3), 151–155. <a href="https://doi.org/10.1097/01.NEP.0000000000000282">https://doi.org/10.1097/01.NEP.0000000000000282</a>
Abstract	“AIM As educators strongly influence the attitudes of their students, the purpose of this study was to determine nurse educator attitudes toward people with disabilities. BACKGROUND Inadequate education of health professionals is a known barrier to care for people with disability. Continuing calls for improved education of health professionals compel an assessment of nurse educator attitudes. METHOD This was a cross-sectional, correlational web-based survey of nurse educators (n = 126). Nurse educator attitudes were analyzed using descriptive statistics, analysis of variance, and multiple regression analysis. RESULTS Nurse educators held discriminatory attitudes toward people with disabilities, though most preferred a biopsychosocial model of disability. Forty-four percent lacked knowledge of disability-related aims, objectives, or outcomes within the curriculum. CONCLUSION To advance equity in health care, nurse educators must confront personal bias and teach competent care of people with disabilities.” (p. 151)
Author	Credentials: EdD, RN Position and Institution: professor, Capstone College of Nursing, University of Alabama Publication History in Peer-Reviewed Journals: Limited
Publication	Type of publication: Scholarly peer-reviewed journal Publisher: National League for Nursing Other: Nursing Education Perspectives
Date and Citation History	Date of publication: May/June 2018 Cited By: 3
Stated Purpose or Research Question	“The purpose of this study was to conduct a multidimensional assessment of nurse educators’ attitudes toward people with disabilities to evaluate how the educators define disability and to examine for relationships among participant attitude, definitions of disability, age, and years of professional experience as a nurse and educator.” (p. 151)
Author’s Conclusion	“Improvement in attitudes can happen through educational efforts, such as teaching the biopsychosocial disability models and reflecting on disability-related issues. As the attitudes of nurse educators impact the developing attitudes of students, nurse educators must identify personal knowledge deficits and attitudes toward disability that may inform their instruction.” (p. 154)
Overall Relevance to your EBP Question	Overall Relevance of Article: Moderate-Good Rationale: This article examined the attitudes of nurse educators and how these negative attitudes can affect students and future nurses. It is relevant information but also only focuses on nursing.
Overall Quality of Article	Overall Quality of Article: Good Rationale: The researcher is an RN and holds a Doctor of Education, so she has experience with the topic. The data is up to date, gathered within the last 5 years.

	Overview of Article
Type of article	Overall Type: Primary research study Specific Type: Semi-structured interviews
APA Reference	McLoughlin, A., Matthews, C., & Hickey, T. (2018). "They're kept in a bubble": Healthcare professionals' views on transitioning young adults with congenital heart disease from paediatric to adult care. <i>Child: Care, Health &amp; Development</i> , 44(5), 736–745. <a href="https://doi.org/10.1111/cch.12581">https://doi.org/10.1111/cch.12581</a>
Abstract	<p>"Background: Due to medical advances, growing numbers of adolescents with congenital heart disease (CHD) survive into adulthood and transferring from paediatric to adult healthcare. This transfer is significant step in a young person's life, and this study examines the views of Irish healthcare professionals' on how best to manage this transition.</p> <p>Methods: Purposeful sampling was used to invite participation by healthcare professionals (HCPs) from a variety of disciplines whose caseloads include adolescents and young adults with CHD. Fourteen professionals participated in semistructured interviews regarding their experiences of the transition process and their recommendations. Data were collected during Spring 2016 and analysed using thematic analysis.</p> <p>Results: Results indicated that the current approach to transition and transfer could be improved. Professionals identified barriers hindering the transition process such as cultural and attitudinal differences between HCPs dealing with child and adult patients, inadequate preparation and education of patients about their condition, parental reluctance to transfer, and concern about parents' role in on-going treatment. Measures such as better support and education for both the patients and their parents were recommended, in order to facilitate a smoother transition process for all parties involved. Additionally, HCPs identified the need for better collaboration and communication, both between paediatric and adult healthcare professionals and between hospitals, to ensure greater continuity of care for patients.</p> <p>Conclusions: Action is required in order to improve the current transition process. Measures need to be taken to address the barriers that currently prevent a smooth transition process for young adult CHD patients. Professionals recommended the implementation of a structured transition clinic to deal with the wide variety of needs of transitioning adolescent patients and their families. Recommendations for future research are also made." (p. 736)</p>
Author	Credentials: BA, MSc Position and Institution: Position unknown at University College Dublin, Dublin, Ireland Publication History in Peer-Reviewed Journals: Minimal
Publication	Type of publication: Scholarly peer-reviewed journal Publisher: Wiley Online Library Other: Child Care Health Development
Date and Citation History	Date of publication: 2018 Google Scholar Cited By: 3
Stated Purpose or Research Question	"A qualitative research design was chosen in order to gain exploratory insights into transition for CHD in Ireland, where no "formal" transition programme was in place at the time of the interviews." (p. 737)
Author's Conclusion	"Action is required in order to improve the current transition process. Measures need to be taken to address the barriers that currently prevent a smooth transition process for young adult CHD patients. Professionals recommended the implementation of a structured transition clinic to deal with the wide variety of needs of transitioning adolescent patients and their families. Recommendations for future research are also made." (p. 736)
Overall Relevance to your EBP Question	Overall Relevance of Article: Limited relevance Rationale: The study identifies challenges for children with disabilities and their families when transitioning into adult care from health professional's but doesn't exactly address the EBP question.
Overall Quality of Article	Overall Quality of Article: Moderate quality Rationale: Published two years ago. Author's credibility is limited. Published in a reputable online journal. Study is somewhat relevant to the EBP question.

	Overview of Article
Type of article	Overall Type: Primary Research Study Specific Type: Cross-Sectional Questionnaire
APA Reference	Miller, S., Ross, S., & Cleland, J. (2009). Medical students' attitudes towards disability and support for disability in medicine. <i>Medical Teacher</i> , 31(6), e272-e277. DOI: <a href="https://doi.org/10.1080/01421590802516814">10.1080/01421590802516814</a>
Abstract	<b>“Background:</b> The number of medical students disclosing a disability is lower than the number of disabled doctors. <b>Aims:</b> This study aimed to examine rates and types of disability in medical students, whether students disclosed this disability and their support needs, and, if not, possible reasons for non-disclosure. <b>Methods:</b> This was a cross-sectional questionnaire study of all medical students registered at the University of Aberdeen in October 2007 (n = 944). <b>Results:</b> Six percent of respondents considered they had a disability on application to medical school, but only 4% had disclosed this on admission. After reading the legal definition of disability, the percentage of respondents considering themselves as having a disability increased to 13%. Disabilities included: specific learning difficulties; mental health issues; sensory impairment; chronic illness; and mobility problems. Challenges to their studies due to disability were reported by nearly half of the disabled respondents but two-thirds had not sought support. Twelve percent reported experiencing discrimination due to their disability. Broader attitudes to disability indicated that many (75%) respondents believed some disabilities would prevent the study of medicine. <b>Conclusions:</b> Non-disclosure of disability in medical students may be due to several factors including narrow definitions of disability and negative attitudes towards disability from the wider student body” (p. e272).
Author	<b>Sarah Miller (first author listed)</b> , MBChB Clinical Teaching Fellow, University of Aberdeen, UK <b>Jennifer Cleland</b> , BSc, PhD, MSc, D Clinical Psychologist, Clinical Senior Lecturer Head of Medical Education Research and leads the Communication Skills strand for the MBChB course. Publication history in peer-reviewed journals: Extensive
Publication	Type of publication: Peer-Reviewed Academic Journal Publisher: Taylor and Francis Group Other: Journal is in collaboration with the Association for Medical Education in Europe.
Date and Citation History	Date of publication: 2009 Cited By: 33
Stated Purpose or Research Question	“The aims of this study were to obtain a snapshot of current rates and types of disability, whether students disclosed disabilities to the medical school on application, what particular difficulties disabled students have experienced, and what support they have obtained, or would value, and to identify wider student views on the inclusion of disabled medical students and doctors” (p. e273).
Author’s Conclusion	“Non-disclosure of disability in medical students may be due to several factors including narrow definitions of disability and negative attitudes towards disability from the wider student body” (p. e272).
Overall Relevance to your EBP Question	Overall Relevance of Article: Good Rationale: This study looks at medical students’ attitudes towards disability, particularly toward people with disabilities becoming doctors. It also explores why medical students with disabilities themselves may not disclose that they have a disability.
Overall Quality of Article	Overall Quality of Article: Moderate Rationale: Decent sample size (n=944); however all participants came from the same medical school. Researchers mention the possibility of selection bias, as individuals with disabilities may have been more likely to respond than non-disabled students. Study is also over 10 years old and from the UK. Last author listed had extensive credentials and publication history.

	<b>Overview of Article</b>
Type of article	Overall Type: Primary research study: Quantitative Specific Type: Two-part comparative study.
APA Reference	Morin D, Valois P, Crocker AG, Robitaille C, Lopes T. (2018). Attitudes of health care professionals toward people with Intellectual Disability: A comparison with the general population. <i>Journal of Intellectual Disability Research</i> . 2018;62(9):746-758. <a href="https://doi.org/10.1111/jir.12510">https://doi.org/10.1111/jir.12510</a>
Abstract	“Abstract: Background: Few studies have examined attitudes that may promote the social inclusion of persons with an intellectual disability (ID) among health care providers (HCPs). Yet these attitudes could impact the accessibility and quality of services provided to this population, as well as the general attitudes of HCPs. The objectives of this study were to ( 1) examine HCPs' pro-inclusion attitudes toward people with ID, ( 2) compare these to the general population's attitudes and ( 3) examine how HCPs' attitudes vary as a function of their socio-demographic characteristics. Method: The Attitudes Toward Intellectual Disability Questionnaire was administered to 367 HCPs and a representative sample of the Québec population (N = 1605). Results: Results indicated that at least half of HCPs displayed positive attitudes, that is, attitudes that are compatible with notions of social inclusion and equal rights, toward individuals with ID. Positive attitudes were less frequently observed for the Interaction and the Sensitivity or tenderness factors measured by the Attitudes Toward Intellectual Disability Questionnaire. In comparison with the general population, HCPs exhibited more positive attitudes on the Knowledge of causes and Sensitivity or tenderness factors and less positive attitudes on the Interaction factor. HCPs who regarded themselves as more knowledgeable about ID and those who reported higher quality contacts or interactions with persons with ID expressed attitudes that were more favourable toward social inclusion. Conclusions: In addition to providing general knowledge about ID and the specific health care needs of individuals with ID, training programmes should also promote interactions with this population. Further studies are needed to document HCPs' pro-inclusion attitudes toward people with ID and to assess the impact of interventions on these attitudes.” (Para. 1)
Author	Credentials: PhD Position and Institution: Dr. Diane Morin, Department of Psychology, Université du Québec à Montréal Publication History in Peer-Reviewed Journals: Moderate
Publication	Type of publication: Scholarly peer reviewed Publisher: WILEY. Other: Journal of Intellectual Disability Research.
Date and Citation History	Date of publication: 2018 Cited By: 11
Stated Purpose or Research Question	“The objectives of this study were threefold: ( 1) examine HCPs' pro-inclusion attitudes toward people with ID, ( 2) compare their attitudes to those of the general population and ( 3) examine HCPs' attitudes as a function of their socio-demographic characteristics.” (Para. 8)
Author's Conclusion	“More studies need to be conducted among primary HCPs to further document their attitudes toward people with ID in the cognitive, affective and behavioural dimensions. The reasons the behavioural component of attitudes tended to be the least favourable must be studied to identify the most efficient intervention in advocating inclusive practices.” (Para. 29)
Overall Relevance to your EBP Question	Overall Relevance of Article: Good This study analyzes the attitudes of healthcare professionals towards individuals with intellectual disability. It concludes that there is a need for training programs to promote positive interactions between healthcare professionals and patients with intellectual disability.
Overall Quality of Article	Overall Quality of Article: Good Publication within the last 5 years. Reputable journal. Author is well established.



	<b>Overview of Article</b>
Type of article	Overall Type: Primary research study Specific Type: Questionnaire survey
APA Reference	Ormond, K., Gill, C., Semik, P., & Kirschner, K. (2003). Attitudes of health care trainees about genetics and disability: Issues of access, health care communication, and decision making. <i>Journal of Genetic Counseling</i> , 12(4), 333-349. <a href="https://doi.org/10.1023/A:1023953022290">https://doi.org/10.1023/A:1023953022290</a>
Abstract	“Prior studies suggest that knowledge and attitudes of health care professionals influence patient communication and medical decision making. To study this dynamic in the context of genetic disability, we developed a survey on health professionals' attitudes regarding disability and genetic screening and pilot-tested it on a sample of medical students, residents, and genetic counseling students (N = 85). Despite minimal experience with disability or genetics, most respondents reported feeling comfortable dealing with genetics (59%) and disability (75%). The majority felt that disability caused significant suffering for both the person (51%) and family (64%), and that research should be directed toward preventing genetic disability (62%). Similar to prior literature, perceived "Quality of Life" was most often based on degrees of physical and cognitive functioning, pain, and social support. However, differences were found between genetic counseling trainees and other medical trainees in their relative emphasis of social versus medical issues in questions of disability and genetic testing, and these response patterns were associated with differences in the groups' priorities for offering information about social resources. Respondents agreed that access to genetic testing and information is personal and that testing should be available upon request for oneself (68%) and to a lesser degree for one's fetus (55%) or child (41%). However, the same individuals frequently stated that society should regulate access to such technologies. Although most felt that the patient and professional should jointly make such decisions on a case-by-case basis, it was also seen as appropriate for the health care professional to occasionally decline genetic testing. It seems apparent that training and experience influence knowledge and attitudes. Therefore, it is critical to document knowledge and attitudes of various health care providers and trainees, including differences between various specialties, to improve educational interventions geared to this area. Application of vocational training models and models of workplaces for the employment of people with disabilities in Lithuania and Ukraine. The results of an on-line questionnaire-based quantitative research are introduced. It was found out that when choosing a model of vocational rehabilitation and model of workplaces for the employment of people with disabilities in each of the countries the historical, cultural, religious aspects must be regarded and country's development, tradition and environment as well as the completeness of the vocational rehabilitation and employment model must be assessed.” (p. 333)
Author	Credentials: MS, CGC Position and Institution: Genetics Professor at Stanford University Publication History in Peer-Reviewed Journals: Moderate
Publication	Type of publication: Scholarly peer-reviewed journal Publisher: National Society of Genetic Counselors Other: N/A
Date and Citation History	Date of publication: 2003 Google Scholar Cited By: 43
Stated Purpose or Research Question	“The aim of this study was to examine providers’ explicit and implicit disability attitudes, interactions between their attitudes, and correlates of explicit and implicit bias.” (p. 101)
Author’s Conclusion	“However, differences were found between genetic counseling trainees and other medical trainees in their relative emphasis of social versus medical issues in questions of disability and genetic testing, and these response patterns were associated with differences in the groups’ priorities for offering information about social resources. It seems apparent that training and experience influence knowledge and attitudes. Therefore, it is critical to document knowledge and attitudes of various health care providers and trainees, including differences between various specialties, to improve educational interventions geared to this area.” (p. 333-334)
Overall Relevance to your EBP Question	Overall Relevance of Article: Strong relevance Rationale: This study compares different types of healthcare workers in regards to their implicit and explicit attitudes towards people with disabilities.
Overall Quality of Article	Overall Quality of Article: Moderate quality Rationale: Published over ten years ago. Results are based on volunteers, not random assignments. Addresses the EBP question about healthcare providers’ attitudes.

	<b>Overview of Article</b>
Type of article	Overall Type: Secondary Research Study Specific Type: Systematic Review
APA Reference	Pelleboer-Gunnink, H. A., Van Oorsouw, W. M. W. J., Van Weeghel, J., & Embregts, P. J. C. M. (2017). Mainstream health professionals' stigmatising attitudes towards people with intellectual disabilities: A systematic review. <i>Journal of Intellectual Disability Research</i> , 61(5), 411–434. <a href="https://doi.org/10.1111/jir.12353">https://doi.org/10.1111/jir.12353</a>
Abstract	“Background Equal access to mainstream healthcare services for people with intellectual disabilities (ID) still requires attention. Although recent studies suggest that health professionals hold positive attitudes towards people with ID, stigmatising attitudes may influence their efforts to serve people with ID in community healthcare practice. To stimulate inclusion in mainstream healthcare services, this systematic review focussed on barriers in attitudes of mainstream health professionals towards people with ID. Method Five electronic databases were systematically searched and references in full text articles were checked for studies published in the English language between January 1994 and January 2016. A social–psychological triad of cognitive, affective and behavioural dimensions of stigmatising attitudes is used to structure and discuss the results. Results The literature search generated 2190 records with 30 studies that passed our exclusion criteria. Studies were mostly cross-sectional and of moderate quality. With respect to stigma, a lack of familiarity with and knowledge about people with ID was found. ID was considered as a stable condition not under personal control. Moreover, mainstream health professionals had either low or high expectations of the capabilities of people with ID. Professionals reported stress, lack of confidence, fear and anxiety, a tendency to treat people with ID differently and a lack of supporting autonomy. Conclusions Stigmatising attitudes towards people with ID appeared to be present among mainstream health professionals. This might affect the ongoing challenges regarding inclusion in mainstream healthcare services. To facilitate inclusion in mainstream healthcare services, it is recommended to include contact and collaboration with experts by- experience in education programs of health professionals. Future research should progress beyond descriptive accounts of stigma towards exploring relationships between cognitive, affective and behavioural dimensions as pointers for intervention. Finally, inclusion would benefit from an understanding of ‘equal’ treatment that means reasonable adjustments instead of undifferentiated treatment.” (p. 411)
Author	Credentials: PhD candidate Position and Institution: Tilburg School of Social and Behavioral Sciences Publication History in Peer-Reviewed Journals: Limited
Publication	Type of publication: Scholarly peer-reviewed journal Publisher: MENCAP, International Association of the Scientific Study of Intellectual and Developmental Disabilities, and John Wiley & Sons Ltd Other: Journal of Intellectual Disability Research
Date and Citation History	Date of publication: May 2017 Cited By: 44
Stated Purpose or Research Question	“In the present review, we therefore aimed to appraise the findings of studies to address the following questions: (1) do mainstream health professionals hold stigmatising attitudes towards people with ID? and (2) what is the nature of these attitudes?” (p. 412)
Author’s Conclusion	“Present results showed that stigmatizing attitudes towards people with ID are found among professionals.” (p. 431) “...people with ID were perceived as different compared to other patients and as well as childlike, funny, strange or intimidating. Professionals reported low or high expectations of the capabilities of people with ID.” (p. 431)
Overall Relevance to your EBP Question	Overall Relevance of Article: Good Rationale: This article gives a broad overview of the general biases health professionals have towards people with intellectual disabilities. While the population of ID is smaller than the general “people with disabilities”, this article examines the attitudes as well as the effect on providing health care.
Overall Quality of Article	Overall Quality of Article: Good Rationale: The information is up to date and has been cited by a large number of studies. The researcher has some experience with research with 8 other published articles.

	Overview of Article
Type of article	Overall Type: Primary Research Study (qualitative, quantitative, etc.) Specific Type: Cross-sectional design
APA Reference	Rose, N., Kent, S., & Rose, J. (2012). Health professionals' attitudes and emotions towards working with adults with intellectual disability (ID) and mental ill health. <i>Journal of Intellectual Disability Research</i> , 56(9), 854–864. <a href="https://doi.org/10.1111/j.1365-2788.2011.01476.x">https://doi.org/10.1111/j.1365-2788.2011.01476.x</a>
Abstract	“Objectives: Mainstream mental health services are providing more care for individuals with an intellectual disability (ID); this has implications for staff and service users. Attitudes of staff towards people with ID in mental health services may be negative and negative staff attitudes may have a detrimental impact on service provision. Design A cross-sectional design was used. Methods A questionnaire designed to investigate the attitudes and emotions of staff towards delivering mental health care to adults with ID was completed by 84 staff from mainstream and specialist ID services. Results Staff in both services experienced more positive emotions when working with clients whom they are currently employed to work with. When the frequency of contact with adults with ID, the number of individuals worked with and the amount of formal ID training received were considered, there was no significant difference between the attitudes of staff in both services. Positive correlations were found between attitude scores and positive emotional experiences in both services. Conclusions The research suggests that numerous factors, including the role of emotional experience and a number of environmental aspects, need to be considered in the context of providing mental health services to adults with ID to ensure the highest quality. Research limitations and clinical implications of the study are also considered.” (p. 854)
Author	Credentials: PhD Position and Institution: Psychological Health Service, Black Country Partnership NHS Foundation Trust, Stourbridge, UK Publication History in Peer-Reviewed Journals: moderate
Publication	Type of publication: Scholarly peer-reviewed journal Publisher: Blackwell Publishing Ltd Other:
Date and Citation History	Date of publication: 2011 Cited By: 36
Stated Purpose or Research Question	“It is predicted that staff from specialist ID services will hold more positive attitudes than staff from mainstream services. It is predicted that staff from specialist ID services will report more positive emotional experience when working with an adult with ID than staff from mainstream services. It is predicted that there will be a positive correlation between attitude scores (AS) and emotional experience scores.” (p. 857)
Author’s Conclusion	“Training with regard to adults with ID should be provided to all staff delivering health-care services, as adults with ID are increasingly being encouraged to access mainstream services. In addition, knowledge deficits in relation to ID have been reported by mainstream staff (Munden & Perry 2002; Costello et al. 2007) and mental health knowledge deficits have been found in specialist ID staff (Garman et al. 1997). This implies that at present neither service may be in an optimum state to ensure the comprehensive mental health-care needs of adults with ID can be met; however, there appears to be scope for development and improvement within both services.” (p. 862)
Overall Relevance to your EBP Question	Overall Relevance of Article: Moderate relevance Rationale: The study examines the effects of staff attitudes towards people with intellectual disabilities and how it might impact their type of service.
Overall Quality of Article	Overall Quality of Article: Good quality Rationale: Established author. Publication within the last 10 years. Relevance to the question.

	Overview of Article
Type of article	Overall Type: Primary research study Specific Type: Conjoint analysis
APA Reference	Rosenthal, D., Chan, F., & Livneh, H. (2006). Rehabilitation students' attitudes toward persons with disabilities in high- and low-stakes social contexts: A conjoint analysis. <i>Disability and Rehabilitation</i> , 28(24), 1517–1527. <a href="https://doi.org/10.1080/09638280600646102">https://doi.org/10.1080/09638280600646102</a>
Abstract	<p><i>Purpose.</i> The primary objective of this research is to examine factors influencing rehabilitation services students' attitudes toward people with disabilities in two social contexts using a conjoint analysis design.</p> <p><i>Method.</i> Ninety-nine students in rehabilitation counselling participated in a conjoint measurement study featuring 55 stimulus cards representing varying disability types, genders, races or ethnicities, grade point averages, internship evaluations, and employment statuses for both high-stakes scenarios and low-stakes scenarios. The participants were instructed to order the stimulus cards to indicate their preferences for associating with different people with disabilities in two social contexts: A high-stakes context as a rehabilitation administrator hiring a counsellor and a low-stakes context as a mentor/companion.</p> <p><i>Results.</i> The results showed that age and disability type were most involved in the decision-making process in the low-stakes group, and performance-related variables were most important in the high-stakes context. Attitude was significantly affected by client characteristics unrelated to disability including age and race or ethnicity, and factors influencing attitude formation differed across the two social contexts.</p> <p><i>Conclusion.</i> Conjoint analysis can contribute to our understanding of the formation of attitudes or preferences in multiple social contexts. Using these results, it may be possible to develop effective attitude change strategies." (p. 1517)</p>
Author	Credentials: Ph.D., CRC Position and Institution: Professor and Rehabilitation Psychology Area Chair in the Department of Rehabilitation Psychology and Special Education at University of Wisconsin, Madison Publication History in Peer-Reviewed Journals: Moderate
Publication	Type of publication: Scholarly peer-reviewed journal Publisher: Taylor & Francis Online Other: N/A
Date and Citation History	Date of publication: 2009 Google Scholar Cited By: 61
Stated Purpose or Research Question	"The primary objective of this research is to examine factors influencing rehabilitation services students' attitudes toward people with disabilities in two social contexts using a conjoint analysis design." (p. 1517)
Author's Conclusion	"Conjoint analysis can contribute to our understanding of the formation of attitudes or preferences in multiple social contexts. Using these results, it may be possible to develop effective attitude change strategies." (p. 1517)
Overall Relevance to your EBP Question	Overall Relevance of Article: Strong relevance Rationale: This study directly answers the EBP question in regards to healthcare professionals' attitudes towards people with disabilities.
Overall Quality of Article	Overall Quality of Article: Good quality Rationale: Author is credible. Article has been cited numerous times. Has relevance to the EBP question. Was published 11 years ago.

	Overview of Article
Type of article	Overall Type: Review of Research Study Specific Type: Review of the Literature
APA Reference	Ryan, T. A., & Scior, K. (2014). Medical students' attitudes towards people with intellectual disabilities: A literature review. <i>Research in Developmental Disabilities, 35</i> (10), 2316-2328. <a href="https://doi.org/10.1016/j.ridd.2014.05.019">https://doi.org/10.1016/j.ridd.2014.05.019</a>
Abstract	"The present paper provides a review of research on medical students' attitudes to people with intellectual disabilities. The attitudes of medical students warrant empirical attention because their future work may determine people with intellectual disabilities' access to healthcare and exposure to health inequalities. An electronic search of Embase, Ovid MEDLINE(R), PsycINFO, Scopus, and Web of Science was completed to identify papers published up to August 2013. Twenty-four studies were identified, most of which evaluated the effects of pedagogical interventions on students' attitudes. Results suggested that medical students' attitudes to people with intellectual disabilities were responsive to interventions. However, the evidence is restricted due to research limitations, including poor measurement, self-selection bias, and the absence of control groups when evaluating interventions. Thus, there is a dearth of high-quality research on this topic, and past findings should be interpreted with caution. Future research directions are provided" (p. 2316).
Author	Author One Credentials: Travis A. Ryan Position and Institution: Graduate student, Research Department of Clinical, Educational and Health Psychology, University College London, UK Publication History: Minimal  Author Two Credentials: Katrina Scior, BSc DCLinPsy PhD Position and Institution: Professor of Clinical Psychology and Stigma Studies, Joint Director of DCLinPsy, University College London, UK Publication History: Extensive
Publication	Type of publication: Peer-Reviewed Journal Publisher: Elsevier
Date and Citation History	Date of publication: 2014 Cited By: 42
Stated Purpose or Research Question	"This paper aims to provide an enhanced understanding of medical students' attitudes to people with ID by reviewing extant research on this topic. A subsidiary goal is the elucidation of future research directions that would incrementally advance the literature base" (p. 2317).
Author's Conclusion	"This review suggests that teaching and training may improve medical students' attitudes, with interventions driven by intergroup contact theory (Pettigrew, 1998) holding promise. However, the review also identifies the need for more robust research to accurately understand (a) medical students' attitudes towards people with ID and (b) the kinds of interventions that improve these attitudes. Attitude enhancement is the ultimate goal of research on ID stigma" (p. 2327).
Overall Relevance to your EBP Question	Overall Relevance of Article: Good Rationale: The conclusion from this article pertains to the "implications for training" aspect of our research question. It also states the need for more research on attitudes towards disability among health professionals (in this case medical students).
Overall Quality of Article	Overall Quality of Article: Good Rationale: Published in the last 10 years. Examined 24 studies on the topic, some of which may be outdated. Some limitations with the included studies. Article was cited 42 times and the second author listed is highly qualified and has an impressive publication history.

	<b>Overview of Article</b>
Type of article	Overall Type: Review of Research Study Specific Type: Systematic Review
APA Reference	Satchidanand, N., Gunukula, S. K., Lam, W. Y., McGuigan, D., New, I., Symons, A. B., Withiam-Leitch, M., & Akl, E. A. (2012). Attitudes of healthcare students and professionals toward patients with physical disability: A systematic review. <i>American Journal of Physical Medicine &amp; Rehabilitation</i> , 91(6), 533–545. <a href="https://doi.org/10.1097/PHM.0b013e3182555ea4">https://doi.org/10.1097/PHM.0b013e3182555ea4</a>
Abstract	<p>“Objective: Negative healthcare provider attitudes toward patients with physical disabilities may challenge the delivery of quality care to patients. The objective of this study was to systematically review published studies examining the attitudes of healthcare students and professionals toward patients with physical disabilities.</p> <p>Design: In October 2011, we searched four electronic databases using the OVID platform. In addition, we screened citation lists. Independent reviewers completed the selection of articles and data abstraction by triplicate review using standardized and pilot tested forms. They resolved disagreements by discussion or with the help of an additional reviewer when necessary. Articles were included if they examined healthcare professionals’ and students’ attitudes toward patients with physical disabilities. We did not perform a meta-analysis because of the variation in instruments used and variables examined. We used a qualitative approach to identifying and reporting common findings across the studies.</p> <p>Results: Results indicate that healthcare students and professionals have favorable attitudes toward persons with physical disabilities. More experience with persons with physical disabilities, both professionally and socially, was associated with more favorable attitudes. In addition, female healthcare students and professionals were found to have more positive attitudes toward patients with physical disabilities than do their male colleagues. Limited evidence exists examining the influence of age, race or ethnicity, and rank of student or professional on attitudes toward patients with physical disabilities. Finally, it was found that healthcare students and professionals reported overall more favorable attitudes than did individuals in non-healthcare professions.</p> <p>Conclusions: Overall, healthcare students’ and professionals’ attitudes toward persons with physical disabilities were favorable. However, some studies revealed the possibility that some healthcare providers demonstrate fear and anxiety with the challenge of caring for a patient with physical disabilities. Some of the factors associated with providers’ attitudes toward patients with physical disabilities are potentially modifiable (e.g., experience) and could be the target of educational interventions to ameliorate this fear and facilitate higher quality care.” (p. 533)</p>
Author	Credentials: PhD Position and Institution: Assistant Professor, Department of Medicine- Exercise Psychologist, University at Buffalo, NY Publication History in Peer-Reviewed Journals: moderate
Publication	Type of publication: Scholarly peer-reviewed journal Publisher: Lippincott Williams & Wilkins Other:
Date and Citation History	Date of publication: 2012 Cited By: 84
Stated Purpose or Research Question	“The objective of this study was to systematically review published studies examining the attitudes of healthcare students and professionals toward patients with physical disabilities.” (p. 534)
Author’s Conclusion	“The results of this systematic review indicate that both students and professionals in various healthcare fields demonstrate generally favorable attitudes toward patients with physical disabilities. However, some feelings of fear and discomfort coupled with a lack of knowledge and experience serving patients with physical disabilities were discovered. These factors may lead to inequities in healthcare delivery to these patients.” (p. 541)
Overall Relevance to your EBP Question	Overall Relevance of Article: Moderate relevance Rationale: The study examines published studies of healthcare students and professionals attitudes towards patients with disabilities.
Overall Quality of Article	Overall Quality of Article: Good quality Rationale: Established author. Publication within the last 10 years.

	Overview of Article
Type of article	Overall Type: Primary Research Study (qualitative, quantitative, etc.) Specific Type: Experimental, full factorial design
APA Reference	Shiloh, S., Heruti, I., & Berkovitz, T. (2011). Attitudes toward people with disabilities caused by illness or injury: Beyond physical impairment. <i>International Journal of Rehabilitation Research</i> , 34(4), 321–329. <a href="https://doi.org/10.1097/MRR.0b013e32834d2048">https://doi.org/10.1097/MRR.0b013e32834d2048</a>
Abstract	“This study examined differences in attitudes toward and reactions to individuals with comparable disabilities caused by injury or illness. Participants were students and healthcare professionals randomly assigned to read one of eight vignettes constructed in a between-subjects, full-factorial design: 2 (illness / injury) × 2 (male / female) × 2 (visible / not visible). Participants completed questionnaires measuring reactions to the target person and attitudes toward people with disabilities. We found that both students and healthcare professionals expressed more positive attitudes toward persons with injury -related compared with illness -related disabilities, but that these differences were typically not expressed in reported social encounters with individual disabled persons. The effects of the illness - injury distinction were moderated by sex only among students, with the highest distancing reported from a female with an illness-related disability. Visibility of the disability triggered more social distancing among students, regardless of the injury - illness distinction. We concluded that the illness - injury distinction is a socially and psychologically significant factor.” (p. 321)
Author	Credentials: PhD Position and Institution: Professor, Program in Health Psychology, Tel Aviv University. Publication History in Peer-Reviewed Journals: extensive
Publication	Type of publication: Scholarly peer-reviewed journal Publisher: Lippincott Williams & Wilkins Other:
Date and Citation History	Date of publication: 2011 Cited By: 14
Stated Purpose or Research Question	“This study investigated the illness/injury distinction as a potential correlate of providers’ reactions and attitudes toward patients.” (p. 323)
Author’s Conclusion	“We found that students as well as healthcare professionals expressed more positive attitudes toward injured than ill persons with disabilities, a finding with small effect sizes among students and medium effect sizes among healthcare professionals. Findings showing that participants reacted to the illness/injury distinction despite the subtlety of the wording are therefore even stronger. These attitude differences were typically not expressed in reported social encounters with individual persons. Sex-moderated social distancing occurred only among students, with a higher tendency to distance oneself from a female with an illness (but not with an injury). Visibility of the disability triggered more social distancing among students regardless of the injury–illness distinction.” (p. 325-326)
Overall Relevance to your EBP Question	Overall Relevance of Article: Moderate relevance Rationale: The study examines the difference in attitudes and reactions of healthcare professionals towards individuals with disabilities caused by either illness or injury.
Overall Quality of Article	Overall Quality of Article: Good quality Rationale: Established author. Publication within the last 10 years.



	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Study Specific Type: cross-sectional survey
APA Reference	Stachura, K., & Garven, F. (2007). A national survey of occupational therapy students' and physiotherapy students' attitudes to disabled people. <i>Clinical Rehabilitation</i> , 21(5), 442-449. <a href="https://doi.org/10.1177/0269215507073495">https://doi.org/10.1177/0269215507073495</a>
Abstract	“Objective: To investigate the possible influence of curricular and non-curricular activities on the attitudes of occupational therapy and physiotherapy students towards disabled people at the beginning and end of their pre-registration education. Design: A cross-sectional survey. Setting: United Kingdom. Participants: Two thousand two hundred and ninety-nine students. Main outcome measures: Interaction with Disabled Persons’ Scale. Results: Occupational therapy and physiotherapy programmes attract different types of student. Occupational therapy students’ attitudes to disabled people were significantly more positive than those of physiotherapy students at the beginning (P 0.0001) and end (P 0.0001) of their respective programmes. Students with disabled family members (P 0.0001) and informal social contact with disabled people (P 0.0001) had significantly more positive attitudes than those without such contact, and such students tend to choose occupational therapy as a career. Work experience with disabled people did not significantly influence the attitudes towards disabled people of occupational therapy students at the end of their programme (P 0.187) but did for all other students. A significantly higher proportion of occupational therapy students undertake extracurricular employment and socialize with disabled people than their physiotherapy counterparts. Conclusion: Physiotherapy students hold less positive attitudes to disabled people than occupational therapy students at both the beginning and end of their preregistration education. Physiotherapy educators need to give greater credit for work experience with disabled people and to ensure the provision of appropriate disability training to counteract possible overemphasis on physical impairments in the curricula” (p. 442).
Author	Credentials: MSc BA MCSP Position and Institution: School of Health and Social Care, Glasgow Caledonian University, Glasgow, Scotland Publication History in Peer-Reviewed Journals: limited
Publication	Type of publication: scholarly peer-reviewed journals Publisher: SAGE Publications Other: Impact factor of 1.772 (2010)
Date and Citation History	Date of publication: 2007 Google Scholar Cited By: 74
Stated Purpose or Research Question	“It was hypothesized that both groups of students’ attitudes would become more positive by the end of their programmes, and that the attitudes of occupational therapy students would be more positive than those of physiotherapy students at both the beginning and end of their programmes. Further, it was hypothesized that those students with different types of extracurricular contact, namely, greater contact with disabled people; informal work experience and informal social contact, would have more positive attitudes to disabled people than those students who did not have such contact” (p. 443).
Author’s Conclusion	“The results of this survey have to be considered in the context of the disappointing overall return rate with varying returns from different programmes and student cohorts...The hypotheses that occupational therapy students would hold more positive attitudes towards disabled people than physiotherapy students at the beginning and end of their respective programmes, and that both groups’ attitudes would become more positive by the final year of their programme, were upheld as can be seen in Table 2” (p. 446-447).
Overall Relevance to your EBP Question	Overall Relevance of Article: Moderate Rationale: This study examined healthcare students attitudes towards disability using a psychometrically sound scale, although it was conducted in the UK, not the US. The researchers also discussed factors that impacted attitudes, which may have implications for training.
Overall Quality of Article	Overall Quality of Article: Moderate Rationale: This article is from a peer reviewed journal, has been cited numerous times, and is slightly less than 15 years old. The researchers discuss potential bias of the results, as there was a low response rate.



	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Study (qualitative, quantitative, etc.) Specific Type: longitudinal multiple case study approach, qualitative data, semi-structured interviews
APA Reference	Sukhera, J., Miller, K., Scerbo, C., Milne, A., Lim, R., & Watling, C. (2020). Implicit stigma recognition and management for health professionals. <i>Academic Psychiatry, 44</i> (1), 59–63.
Abstract	“Objective: Stigma against individuals with mental illness has disastrous consequences for patient outcomes. Better approaches to reducing stigma in health care professionals are required. Implicit stigma education is an emerging area of research that may inform the design and implementation of stigma reduction programs. In this "in brief report," the authors describe the evaluation of a novel implicit stigma reduction workshop for health professionals. Methods: The authors conducted a realist evaluation using a longitudinal multiple case study approach. Once a conceptual model was established, three case studies were conducted on physicians and nurses (n = 69) at an academic health sciences center. Within each case, pre- and post-attitudinal scales and qualitative data from semi-structured interviews were used. Consistent with realist evaluation principles, context-mechanism-outcome configuration patterns were analyzed. Results: An implicit stigma recognition and management workshop produced statistically significant changes in participant attitudes in two out of three contexts. The qualitative evaluation described the perceptions of sustainable changes in perspective and practice. The degree to which individual participants learned with and worked among inter-professional teams influenced outcomes. Conclusions: Implicit stigma recognition and management is a useful educational strategy for reducing stigma among health professionals. Once stigma is recognized, curricular interventions may promote behavioral change by encouraging explicit alternative behaviors that are sustained through social reinforcement within inter-professional teams" (p. 59)
Author	Credentials: credentials could not be located Position and Institution: School of Medicine and Dentistry, Western University Publication History in Peer-Reviewed Journals: extensive (over 250 articles)
Publication	Type of publication: scholarly peer reviewed journal Publisher: Springer Other: Academic Psychiatry Journal
Date and Citation History	Date of publication: November 7, 2019 Cited By: 3
Stated Purpose or Research Question	“Research on implicit bias recognition and management offers potential insights in to addressing implicit aspects of stigma. In this paper, we will describe an educational activity designed to facilitate implicit stigma recognition and management among health professions” (p. 59-60).
Author’s Conclusion	“Overall, our experiences suggests that implicit stigma reductio is a novel yet potentially useful strategy at reducing stigmatizing attitudes and behaviors toward individuals with mental illness. Our evaluation suggests that educational interventions to reduce stigma that are informed by implicit bias recognition and management are more effective if conducted within healthcare teams and strongly influences by the social interactions between peers within the workplace after intervention is delivered” (p. 62).
Overall Relevance to your EBP Question	Overall Relevance of Article: Good Rationale: this article is directly related to our EBP question because it provided techniques to implement to decrease the stigma about individuals with disabilities within health care professionals.
Overall Quality of Article	Overall Quality of Article: Moderate Rationale: This article did not have all of the components that articles typically have such as a conclusion section. This was also a shorter article. There could have been more depth into the reasons as to why the research was needed.

	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Study (qualitative, quantitative, etc.) Specific Type: Controlled Non-Randomized Pre-test Post-test
APA Reference	Symons, A. B., Morley, C. P., McGuigan, D., & Akl, E. A. (2014). A curriculum on care for people with disabilities: Effects on medical student self-reported attitudes and comfort level. <i>Disability and Health Journal</i> , 7(1), 88–95. <a href="https://doi.org/10.1016/j.dhjo.2013.08.006">https://doi.org/10.1016/j.dhjo.2013.08.006</a>
Abstract	<p>“Background: Early, frequent encounters with people with disabilities may improve medical students’ knowledge, attitudes and skills regarding their care. We developed and implemented a longitudinal four-year curriculum addressing caring for people with disabilities.</p> <p>Objectives/hypothesis: To test differences in mean scores between intervention and control groups on individual post-survey items regarding attitudes toward people with disabilities, and to conduct exploratory procedures to examine individual factors that may account for group differences.</p> <p>Methods: Students at two U.S. medical schools, one with the new curriculum, and one with no specific disabilities curriculum, were surveyed in Year 1 of medical school, prior to curriculum introduction, and again at the end of Year 3, using a validated 30-item instrument measuring medical students’ self-reported attitudes and comfort toward people with disabilities. We compared mean item ratings between the two groups using c2 and ANOVA. Principal components analysis was then used to construct linear composite variables that were then regressed on potential predictors of attitudes and comfort level.</p> <p>Results: The intervention led to significant or near-significant improvement in several factors. However, male students in the intervention group, particularly those who encountered people with disabilities in a clinical context, had a tendency to more frequently agree with negative statements (b 5 .628, p 5 .005).</p> <p>Conclusions: Exposure of medical students to a longitudinal curriculum for caring for people with disabilities led to significant improvement in several factors related to comfort and attitudes. The gender-related reinforcement of some negative attitudes merits further investigation and caution when implementing the curriculum in the future. Ó 2014 Elsevier Inc. All rights reserved.” (p. 88)</p>
Author	<p>Credentials: MD, MS</p> <p>Position and Institution: Physician Family Medicine, University at Buffalo, NY</p> <p>Publication History in Peer-Reviewed Journals: moderate</p>
Publication	<p>Type of publication: Scholarly peer-reviewed journal</p> <p>Publisher: Elsevier</p> <p>Other:</p>
Date and Citation History	<p>Date of publication: 2014</p> <p>Cited By: 41</p>
Stated Purpose or Research Question	“This paper examines the effect of this curriculum on medical students’ self-reported attitudes and comfort level in caring for people with disabilities.” (p. 89)
Author’s Conclusion	“In summary, we found that exposure of medical students to a curriculum for caring for people with disabilities led to significant (3) or near significant (3) change in several factors related to comfort and attitudes toward people with disabilities. Negative reactions appear to be a gendered phenomenon, with a slightly larger number of negative endorsing males in the intervention group contributing to group differences.” (p. 92-93)
Overall Relevance to your EBP Question	<p>Overall Relevance of Article: Moderate relevance</p> <p>Rationale: The study examines how the development of a disability curriculum improves the attitudes and comfort level of medical students in caring for people with disabilities.</p>
Overall Quality of Article	<p>Overall Quality of Article: Good quality</p> <p>Rationale: Established author. Publication within the last 10 years.</p>

	Overview of Article
Type of article	Overall Type: Primary Research Study Specific Type: Cross-Sectional Survey
APA Reference	Ten Klooster, P.M., Dannenberg, J.-W., Taal, E., Burger, G. and Rasker, J.J. (2009), Attitudes towards people with physical or intellectual disabilities: nursing students and non-nursing peers. <i>Journal of Advanced Nursing</i> , 65, 2562-2573. doi: 10.1111/j.1365-2648.2009.05146.x
Abstract	<p>“<b>Title.</b> Attitudes towards people with physical or intellectual disabilities: nursing students and non-nursing peers. <b>Aim.</b> This paper is a report of a study of the attitudes of Dutch nursing students towards people with physical or intellectual disabilities. <b>Background.</b> Attitudes of healthcare professionals are a major factor in the rehabilitation and self-acceptance of persons with disabilities. Consequently, it is important that nurses develop or maintain positive attitudes towards people with disabilities during their education. However, more knowledge is needed about current attitudes of nursing students and factors influencing these attitudes. <b>Methods.</b> A sample of Dutch nursing students (n = 81) and an age-matched group of non-nursing peers (n = 48) completed standardized scales measuring attitudes about physically or intellectually disabled people. Data were collected in 2006. <b>Findings.</b> Nursing students were more positive towards physically disabled people than their peers, and more strongly endorsed empowerment and similarity of intellectually disabled people. These attitudinal differences generally remained statistically significant after multivariate adjustment for demographic variables and experience and contact with individuals with disabilities. An important independent determinant of a positive attitude towards physically disabled people in the total sample was having a relative or friend with a physical disability. This association, however, was not apparent in attitudes towards intellectually disabled persons. <b>Conclusion.</b> Educational interventions aimed at improving attitudes towards people with disabilities should include focus on forms of contact beyond the context of formal care relationships” (p. 2562).</p>
Author	<p>Credentials: Peter M. ten Klooster PhD Position and Institution: Assistant Professor, Institute for Behavioural Research, Faculty of Behavioural Sciences, University of Twente, Enschede, The Netherlands Publication History in Peer-Reviewed Journals: Extensive</p>
Publication	<p>Type of publication: Peer-Reviewed Journal (Journal of Advanced Nursing) Publisher: Blackwell Publishing</p>
Date and Citation History	<p>Date of publication: 2009 Cited By: 111</p>
Stated Purpose or Research Question	<p>“The aim of the study was to investigate the attitudes of Dutch nursing students towards people with physical or intellectual disabilities. The detailed aims were:</p> <ul style="list-style-type: none"> <li>● To examine the attitudes of Dutch nursing students towards people with physical or intellectual disabilities.</li> <li>● To compare their attitudes with those of an age-matched group of non-nursing peers.</li> <li>● To identify independent determinants of attitudes towards persons with disabilities” (p. 2564).</li> </ul>
Author’s Conclusion	<p>“In sum, this study showed that Dutch nursing students have more positive and supporting attitudes towards people with disabilities than their non-nursing peers. Nursing students’ attitudes appear reasonably positive and in line with those reported in international studies“ (p. 2571).</p>
Overall Relevance to your EBP Question	<p>Overall Relevance of Article: Moderate Rationale: This article gives insight into the attitudes of health professionals (students) towards disability, but is focused on a Dutch population and on nursing students vs non nursing students in particular.</p>
Overall Quality of Article	<p>Overall Quality of Article: Good Rationale: Heavily cited by others. Highly qualified first author with extensive history of publications. Limitations were that the sample was relatively small consisting of just nursing majors from a single institution in the Netherlands.</p>

	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Study (qualitative, quantitative, etc.) Specific Type: Cross-Sectional study
APA Reference	Tervo, R. C., Azuma, S., Palmer, G., & Redinius, P. (2002). Medical students' attitudes toward persons with disability: A comparative study. <i>Archives of Physical Medicine and Rehabilitation</i> , 83(11), 1537–1542. <a href="https://doi.org/10.1053/apmr.2002.34620">https://doi.org/10.1053/apmr.2002.34620</a>
Abstract	“Objectives: To investigate first-year medical students' attitudes toward persons with disability and to examine whether gender and a background in disability determine attitudes toward persons with disability. Design: A cross-sectional survey. Setting: University settings in the United States and Canada. Participants: Ninety first-year medical students (US, n=46; Canada, n=44) were surveyed. Intervention: Medical students given 3 surveys. Main Outcome Measures: Attitude Toward Disabled Persons (ATDP) Scale, Scale of Attitudes Toward Disabled Persons (SADP), and Rehabilitation Situations Inventory (RSI).Results: There were no differences between the medical student groups from the United States and Canada. Compared with norms, medical students overall have more positive attitudes on the ATDP. Their attitudes were less positive on the SADP and on its optimism– human rights subscale. On the RSI, they were less comfortable with sexual situations and depression. Male medical students held poorer attitudes as scored than female medical students. Those with a background in disability were more comfortable dealing with challenging rehabilitation situations. Comfort with challenging rehabilitation situations showed significant differences across levels of experience but not gender. The more positive medical students' attitudes are toward persons with disability, the more likely they are to be comfortable with challenging rehabilitation situations. Conclusion: First-year medical students from the United States and Canada held similar attitudes and had less positive attitudes than SADP norms. Gender and background in disability influenced attitudes. Male medical students were more likely to hold negative attitudes. Specific educational experiences need to promote more positive attitudes.” (p. 1537)
Author	Credentials: MD, MSc Position and Institution: Physician Pediatrician, Gillette Children's Specialty Healthcare, University of Minnesota Publication History in Peer-Reviewed Journals: moderate
Publication	Type of publication: Scholarly peer-reviewed journal Publisher: American Congress of Rehabilitation Medicine and the American Academy of Physical Medicine and Rehabilitation Other:
Date and Citation History	Date of publication: 2002 Cited By: 194
Stated Purpose or Research Question	“Our purpose was to investigate different aspects of medical student attitudes toward persons with disability and factors that might influence those attitudes. Specifically, we hypothesized that attitudes toward persons with disability differ between Canadian and American medical students. Further, we hypothesized that gender and a background in disabilities would influence these attitudes. Using 3 proposed scales provides a broader perspective of medical student attitudes than a single scale. Measuring medical student attitudes may guide educational interventions and monitor attitudinal change.” (p. 1537)
Author's Conclusion	“First-year medical students in 2 different rural settings held similar attitudes toward persons with disability regardless of medical school location and had less positive attitudes on different dimensions of attitudes toward disability. First-year male medical students in the rural medical schools surveyed were at greater risk of holding negative attitudes. Those with a background in disability were more comfortable with challenging rehabilitation situations. The more positive their attitudes, the greater their comfort. Specific educational experiences in medical school are needed to promote more positive physician attitudes to persons with disabilities.” (p. 1541)
Overall Relevance to your EBP Question	Overall Relevance of Article: Moderate relevance Rationale: The study examines first year medical students attitudes towards people with disability based on gender and background in disability.
Overall Quality of Article	Overall Quality of Article: Good quality Rationale: Established author. Reputable journal and publisher.

	<b>Overview of Article</b>
Type of article	Overall Type: Primary research study Specific Type: Cross-sectional Survey
APA Reference	Tervo, R., & Palmer, G. (2004). Health professional student attitudes towards people with disability. <i>Clinical Rehabilitation</i> , 18(8), 908–915. <a href="https://doi.org/10.1191/0269215504cr820oa">https://doi.org/10.1191/0269215504cr820oa</a>
Abstract	<p>“Objective: To investigate health professional student attitudes toward people with disability. It was hypothesized that attitude and comfort would differ by discipline. Further, it was hypothesized that factors such as gender and background in disability would influence these attitudes and their ease in dealing with difficult encounters in rehabilitation. Design: A cross-sectional survey design. Setting: University of South Dakota (USD). Participants: Three hundred and thirty-eight students were surveyed. Main outcome measures: (a) Attitude Toward Disabled Persons (ATDP) scale; (b) Scale of Attitudes Toward Disabled Persons (SADP); (c) Rehabilitation Situations Inventory (RSI).</p> <p>Results: There were differences among student groups on the attitude scales and factor scores. All students' attitudes were less positive than SADP norms and nursing students held the least positive opinions. There were no attitudinal differences by gender. Those with a background in disability held more positive attitudes. Years of experience and hours per week employed predicted comfort with challenging rehabilitation situations. Inconsiderate treatment by staff, inappropriate sexual overtures and aggressive behaviour by patients were stated to be most challenging.</p> <p>Conclusion: Health professional students hold less positive attitudes than SADP norms. Nursing undergraduate students were at greater risk of holding negative attitudes. Work experience was important for comfort with challenging rehabilitation situations. Specific educational experiences are needed to promote more positive attitudes.” (p. 908)</p>
Author	<p>Credentials: MD Position and Institution: Pediatrician at Department of Pediatrics University of Minnesota, Minneapolis and Gillette Children's Specialty Healthcare, St. Paul, MN, Publication History in Peer-Reviewed Journals: Extensive</p>
Publication	<p>Type of publication: Scholarly peer-reviewed journal Publisher: Sage Journals Other: Clinical Rehabilitation</p>
Date and Citation History	<p>Date of publication: 2004 Google Scholar Cited By: 312</p>
Stated Purpose or Research Question	<p>“To investigate health professional student attitudes toward people with disability. It was hypothesized that attitude and comfort would differ by discipline. Further, it was hypothesized that factors such as gender and background in disability would influence these attitudes and their ease in dealing with difficult encounters in rehabilitation.” (p. 908)</p>
Author's Conclusion	<p>“Health professional students hold less positive attitudes than SADP norms. Nursing undergraduate students were at greater risk of holding negative attitudes. Work experience was important for comfort with challenging rehabilitation situations. Specific educational experiences are needed to promote more positive attitudes.” (p. 908)</p>
Overall Relevance to your EBP Question	<p>Overall Relevance of Article: Strong relevance Rationale: The study directly addresses health professional students' attitudes towards people with disabilities.</p>
Overall Quality of Article	<p>Overall Quality of Article: Great quality Rationale: Direct relevance toward EBP question. Very credible author. Published in a credible journal. Unfortunately published 16 years ago.</p>

	Overview of Article
Type of article	Overall Type: Review of Research Study (conjoint analysis) Specific Type: conjoint measures of stimulus cards, conjoint analyses
APA Reference	Tsang, H. W. H., Chan, F., & Chan, C. C. H. (2004). Factors influencing occupational therapy students' attitudes toward persons with disabilities: A conjoint analysis. <i>American Journal of Occupational Therapy</i> , 58(4), 426-434. <a href="https://doi.org/10.5014/ajot.58.4.426">https://doi.org/10.5014/ajot.58.4.426</a>
Abstract	“OBJECTIVES. The purpose of this study was to examine factors influencing occupational therapy students’ context-specific attitudes toward persons with disabilities. METHOD. Attitudes of 128 occupational therapy students toward placement of a residential treatment facility in their community were measured by a conjoint measurement of 16 stimulus cards (representing persons with varying disability types, gender, age, employment history, and history of aggression) and their responses were analyzed using conjoint analysis. FINDINGS. Disability type and threat of violence were significantly higher on important scores compared with the other attributes across all students. Additionally, Year-Three students had significantly higher importance scores for the employment attribute than Year-One students. CONCLUSION. Conjoint analysis can be used effectively, as an indirect measure, to study factors contributing to the formation of attitudes–preferences for persons with disabilities in specific social contexts” (p. 426).
Author	Credentials: PhD Position and Institution: Associate professor in the department of rehabilitation sciences, Polytechnic University Publication History in Peer-Reviewed Journals: Moderate (70 articles)
Publication	Type of publication: scholarly peer reviewed journal Publisher: AOTA Other: American Journal of Occupational Therapy
Date and Citation History	Date of publication: August, 2004 Cited By: 32
Stated Purpose or Research Question	“To explore the application of conjoint analysis in occupational therapy research, the present study employed the conjoint analysis procedure to examine factors influencing occupational therapy students’ context-specific attitudes toward persons with disabilities” (p. 428).
Author’s Conclusion	“Both conjoint measurements and conjoint analysis could increase the ability of occupational therapy researchers to understand factors contributing to the formation of attitudes–preferences in multiple social contexts. This understanding could provide insights for developing effective strategies for changing negative attitudes toward disabilities” (p. 433).
Overall Relevance to your EBP Question	Overall Relevance of Article: Good Rationale: this article is relevant to our EBP question as it is looking into attitudes or biases towards individuals with disabilities. It provides good sources to measure factors that contribute to these attitudes.
Overall Quality of Article	Overall Quality of Article: Good Rationale: With this article not being a primary source and being a conjoint analysis made it a little more difficult to understand the measures used but overall the article gave great insight into the topic of focus.

	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Study Specific Type: Correlational; Survey
APA Reference	VanPuymbrouck, L., Friedman, C., & Feldner, H. (2020). Explicit and implicit disability attitudes of healthcare providers. <i>Rehabilitation Psychology, 65</i> (2), 101–112. <a href="https://doi.org/10.1037/rep0000317">https://doi.org/10.1037/rep0000317</a>
Abstract	<p><b>“Purpose/Objective:</b> Health care providers’ attitudes of marginalized groups can be key factors that contribute to health care access and outcome disparities because of their influence on patient encounters as well as clinical decision-making. Despite a growing body of knowledge linking disparate health outcomes to providers’ clinical decision making, less research has focused on providers’ attitudes about disability. The aim of this study was to examine providers’ explicit and implicit disability attitudes, interactions between their attitudes, and correlates of explicit and implicit bias. <b>Research Method/ Design:</b> We analyzed secondary data from 25,006 health care providers about their disability attitudes. In addition to analyzing people’s explicit and implicit attitudes (Disability Attitudes Implicit Association Test), we used Son Hing, Chung-Yan, Hamilton, &amp; Zanna’s (2008) model of two-dimensional prejudice to compare provider’s explicit and implicit attitudes. Finally, we used linear regression models to examine correlates of providers’ explicit and implicit attitudes. <b>Results:</b> While on average, provider’s explicit attitudes (<math>M = 4.41</math>) indicated little prejudice, their implicit attitudes (<math>M = 0.54</math>) revealed they moderately preferred nondisabled people—they were aversive ableists. Correlates of providers’ explicit and implicit attitudes also included age, gender, political orientation, and having relationships with disability (friends, family, and being a person with disability). <b>Conclusions/Implications:</b> This study revealed that despite a majority of providers self-reporting not being biased against people with disabilities, implicitly, the overwhelming majority were biased. This study’s findings can be used to better understand how provider disability bias can contribute to inequitable health care access and health outcomes for people with disabilities” (p. 101).</p>
Author	<p>Credentials: PhD, OTR/L Position and Institution: Assistant Professor in the Department of Occupational Therapy, College of Health Sciences at Rush University Publication History in Peer-Reviewed Journals: moderate</p>
Publication	<p>Type of publication: scholarly peer-reviewed journal Publisher: American Psychological Association (APA) Other: APA is a scientific and professional organization that represents psychologists</p>
Date and Citation History	<p>Date of publication: 2020 Google Scholar Cited By: 3</p>
Stated Purpose or Research Question	<p>“For these reasons, the aim of this study was to explore the disability attitudes of health care providers. This study had four research questions:</p> <ul style="list-style-type: none"> <li>• What are health care providers’ explicit attitudes toward disability?</li> <li>• What are health care providers’ implicit attitudes toward disability?</li> <li>• What is the relationship between health care providers’ explicit and implicit attitudes?</li> <li>• What demographic factors are associated with lower explicit and implicit disability attitudes of health care providers?” (p. 102-103).</li> </ul>
Author’s Conclusion	<p>“This study provides evidence that the majority of providers are also implicitly biased against PWD, and opens dialogue onto how these attitudes may impact PWD’s health care encounters and clinical decision-making. The differences between the participants’ explicit and implicit attitudes also suggest more precarious ramifications might occur when socially unacceptable implicit attitudes are masked by superficial, explicit acceptance, especially by individuals in traditional positions of power who are entrusted with health-related clinical decisions for PWD” (p. 109).</p>
Overall Relevance to your EBP Question	<p>Overall Relevance of Article: Good Rationale: This article provides an overview of healthcare providers’ attitudes towards people with disabilities, which is exactly what our EBP question is investigating.</p>
Overall Quality of Article	<p>Overall Quality of Article: Good Rationale: This article is from a peer reviewed journal that is published by a scientific and scholarly source (i.e. APA) and it uses a large sample size. It is also very current and appears to use appropriate methods for synthesizing data.</p>

	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Study Specific Type: Mixed-methods
APA Reference	VanPuymbrouck, L. & Friedman, C. (2019). Relationships between occupational therapy students' understandings of disability and disability attitudes. <i>Scandinavian Journal of Occupational Therapy</i> , 27(2), 122-132. <a href="https://doi.org/10.1080/11038128.2019.1596310">https://doi.org/10.1080/11038128.2019.1596310</a>
Abstract	“Background: Entering occupational therapy (OT) students have established beliefs, informed by sociocultural backgrounds. Understanding how students define and understand disability, and the relationships these understandings have to disability bias, can guide curriculum design decisions to integrate meso and macro level perspectives of disability into clinical reasoning. Aim/Objective: This study’s aim was to explore incoming occupational therapy students’ (n = 67) understandings of disability and their attitudes towards it. Material and method: An online survey was used to collect data on students’ attitudes and definitions of disability. Mixed research methods were used to analyze students’ definitions of disability (content analysis) in relation to disability attitudes (Disability Attitudes Implicit Association Test). Results/Finding: Findings reveal students enter curriculums with vast differences in understandings of people with disabilities and these may provide a basis for and contribute to differences in attitudes of disability. Conclusions: OT students have established beliefs of disability as individualized or more socially constructed and these influence disability biases. Significance: Students’ education has considerable influence in shaping attitudes and ways of interacting with people with disability. Understanding students’ assumptions as they enter a program is a first step to evaluate how curriculum design may influence development of student clinical reasoning strategies” (p. 2).
Author	Credentials: PhD, OTR/L Position and Institution: Assistant Professor in the Department of Occupational Therapy, College of Health Sciences at Rush University Publication History in Peer-Reviewed Journals: moderate
Publication	Type of publication: scholarly peer-reviewed journals Publisher: Taylor & Francis Other: N/A
Date and Citation History	Date of publication: 2019 Google Scholar Cited By: 0
Stated Purpose or Research Question	“For these reasons, the purpose of this study was to explore incoming occupational therapy graduate students’ understandings of disability – how they define disability – and their implicit attitudes towards it” (p. 6).
Author’s Conclusion	“Findings revealed occupational therapy students enter their curriculum with vast differences in understandings and views of people with disabilities and these may provide a basis for and contribute to differences in attitudes of disability. Participants often understood disability as individualized – locating the cause within the person. This was evident through the ways they defined disability, often as an impairment or problem with functioning strictly from a biomechanical stance. The consistent feature of the participants’ definitions that fell into the thematic categories of individualization, in/ability, impairment, was aligning the cause of disability within the person; by doing so they ignore limitations or barriers imposed upon people that may construct disabling environments... These findings align with previous research reporting that allied health providers often have negative attitudes and stereotypes of disability...Conversely, some students invoked the concept of social norms to recognize how society ‘others’ people with disabilities based on arbitrary norms about what is average or typical. These participants’ definitions fell into the thematic categories of functioning and social norm which acknowledged the ‘otherness’ people with disabilities often experience” (p. 15-16).
Overall Relevance to your EBP Question	Overall Relevance of Article: Moderate Rationale: This article explores how occupational therapy students (i.e. future healthcare workers) define disability and their attitudes towards people with disabilities, before starting the program. It also incorporates qualitative data and discusses the implications of attitudes on discrimination.
Overall Quality of Article	Overall Quality of Article: Moderate-Good Rationale: The article is very recent, comes from a peer reviewed journal, and uses both qualitative and quantitative data. The author is a healthcare professional (i.e. OTR) and professor.



	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Study Specific Type: Open-ended interviews using a phenomenological approach
APA Reference	Velde, B. (2000). The Experience of being an occupational therapist with a disability. <i>The American Journal of Occupational Therapy</i> , 54, 183-188. <a href="https://doi.org/10.5014/ajot.54.2.183">https://doi.org/10.5014/ajot.54.2.183</a>
Abstract	“Objective. <i>This study addressed what it is like to practice as an occupational therapist with a disability.</i> Method. <i>Open-ended interviews using a phenomenological approach were conducted with 10 participants until data saturation was achieved. Each transcribed interview was coded for categories, and the common themes across transcripts were identified.</i> Results. <i>These major themes were identified: “I am sensitive to their needs”; “The issue is how to cope with life”; and “Recognize your own strengths and limits.” Each theme had several subcategories.</i> Conclusions. <i>Occupational therapists with disabilities approach their practice from a unique perspective and may be able to motivate and challenge clients in a different manner than therapists without disabilities. Therapists with disabilities perceive themselves as uniquely skilled persons who have developed successful strategies to cope with the experience of disability.</i> ” (p. 183)
Author	Credentials: PhD, OTR/L Institution: Graduate Coordinator and Associate Professor, East Carolina University. Publication History in Peer-Reviewed Journals: Moderate
Publication	Type of publication: scholarly peer-reviewed Publisher: American Occupational Therapy Association (AOTA) Other: Official journal of AOTA
Date and Citation History	Date 2000 Google Scholar Cited By: 19
Stated Purpose or Research Question	“Objective. This study addressed what it is like to practice as an occupational therapist with a disability.” (p. 183)
Author’s Conclusion	“Occupational therapists with disabilities approach their practice from a unique perspective and may be able to motivate and challenge clients in a different manner than therapists without disabilities. Therapists with disabilities perceive themselves as uniquely skilled persons who have developed successful strategies to cope with the experience of disability.” (p. 183)
Overall Relevance to EBP Question	Over Relevance to EBP Question: Good The article brings the perspective of occupational therapist with disabilities. It talks about their challenges and how they are able to overcome them.
Overall Quality of Article	Overall Quality: Moderate Reputable journal and publisher. Article publication is 20 years old.

	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Specific Type: Survey research using the Attitudes Toward Disabled Persons Score (ATDP)
APA Reference	White, M. & Olson, R. (2012). Attitudes toward people with disabilities: A comparison of rehabilitation nurses, occupational therapists, and physical therapists. <i>Rehabilitation Nursing, 23</i> (3), 126-13. <a href="https://doi.org/10.1002/j.2048-7940.1998.tb01764.x">https://doi.org/10.1002/j.2048-7940.1998.tb01764.x</a>
Abstract	“This descriptive study was designed to explore the attitudes of rehabilitation nurses, occupational therapists, and physical therapists toward people with disabilities. Attitudes were measured by using the Attitudes Toward Disabled Persons Scale, Form B (ATDP-B). The sample included 150 rehabilitation nurses, 57 occupational therapists, and 43 physical therapists in southeast Texas. Findings suggest that the majority (67%) of the healthcare professionals had positive attitudes toward people with disabilities. Occupational therapists had significantly higher scores than the rehabilitation nurses and physical therapists. Practice setting, age, educational level, and amount of experience had no significant effect on attitude scores. ATDP-B scores tended to increase with work experience, but not to a statistically significant degree. An analysis of the rehabilitation nurses' attitude scores showed that practice setting, age, and educational level had no significant effect. Experience seemed to be correlated with higher attitude scores, although the relationship was not statistically significant.” (p. 126)
Author	Credentials: PhD RN Institution: Associate Professor of Nursing at University of Texas-Houston Health Science Center School of Nursing in Houston Publication History in Peer-Reviewed Journals: Limited
Publication	Type of publication: Peer-reviewed Publisher: Association of Rehabilitation Nurses (ARN) Other: Official journal of the Association of Rehabilitation Nurses (ARN)
Date and Citation History	Date: 2012 Google Scholar Cited By: 75
Stated Purpose or Research Question	“This descriptive study of nurses, occupational therapists, and physical therapists was designed to answer the following research questions: 1. Do rehabilitation nurses, occupational therapists, and physical therapists show significant differences in their attitudes toward people with disabilities? 2. Do rehabilitation nurses who work in various settings have different attitudes toward people with disabilities?” (p.127)
Author’s Conclusion	“Our findings indicated that occupational therapists had a significantly higher ATDP score when compared with nurses and physical therapists. Evidence in the literature supports a relationship between educational level and the promotion of a positive attitude toward people with disabilities (Lee et al., 1994; Paris, 1995). It would be interesting to compare the educational philosophy, goals, and curricula of nurses, physical therapists, and occupational therapists” (p. 130)
Overall Relevance to EBP Question	Overall Relevance to EBP Question: Good The article address attitudes of healthcare professional towards disabilities and shows influence of education on those attitudes.
Overall Quality of Article	Overall Quality: Good Reputable journal and publisher. Publication within the last 10 years.

	<b>Overview of Article</b>
Type of article	Overall Type: Review of Research Study Specific Type: Literature Review
APA Reference	Wilson, M.C. & Scior, K. (2014). Attitudes towards individuals with disabilities as measured by the Implicit Association Test: A literature review. <i>Research in Developmental Disabilities</i> , 35(2), 294-321. <a href="https://doi.org/10.1016/j.ridd.2013.11.003">https://doi.org/10.1016/j.ridd.2013.11.003</a>
Abstract	“Research investigating attitudes towards individuals with disabilities has largely focused on self-reported explicit attitudes. Given that factors such as social desirability may influence explicit attitudes, researchers have developed tools which instead assess less consciously controllable implicit attitudes. Considering research on implicit attitudes thus seems pertinent. A review of studies measuring implicit attitudes towards individuals with physical disabilities (visual, motor or hearing) or intellectual disabilities via the Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998) was carried out. Systematic searches of PsycINFO, CINAHL, EMBASE, ERIC, MEDLINE, PUBMED, Scopus and Web of Science databases identified relevant articles published between January 2000 and September 2012. Seventeen articles (reporting on 18 studies that employed the IAT) were identified. These investigated implicit attitudes towards individuals with; physical disabilities (N = 13), intellectual disabilities (N = 3), both physical and intellectual disabilities (N = 1), and ‘unspecified disabilities’ (N = 1). Across all studies, moderate to strong negative implicit attitudes were found and there was little to no association between explicit and implicit attitudes. Individuals’ beliefs about the controllability of their future, sensitivity to the concept of disease, and contact with individuals with disabilities appear to be associated with implicit attitudes. A consistent pattern of moderate to strong negative implicit attitudes towards individuals with disabilities was evident. These studies provide a starting point, but methodological issues related to sampling and the employed IATs limit the generalizability of these results. Further research investigating implicit attitudes towards specific disability types, with a wider subject pool are necessary as well as further investigation of factors that contribute to these attitudes” (p.294).
Author	Credentials: PhD Position and Institution: Professor, Department of Clinical Educational and Health Psychology, University College London Publication History in Peer-Reviewed Journals: Limited
Publication	Type of publication: scholarly peer-reviewed journal Publisher: Elsevier
Date and Citation History	Date of publication: 2013 Cited By: 50
Stated Purpose or Research Question	“The aim of this review was to summarise the findings of studies that have investigated implicit attitudes towards individuals with disabilities.” (p. 296)
Author’s Conclusion	“The results suggest that relatively strong negative implicit attitudes prevail, and were consistently present over the period of nearly a decade. Research into explicit attitudes towards individuals with disabilities suggests that these have become less negative over time.” (p. 319)
Overall Relevance to your EBP Question	Overall Relevance of Article: Moderate Relevance Rationale: This study describes both implicit and explicit biases of people towards disability; however, this study does not specifically describe the attitudes of healthcare workers and focuses on the general population. This, however, has implications for the attitudes of healthcare workers.
Overall Quality of Article	Overall Quality of Article: Moderate Rationale: This article was published within the past 10 years in a reputable journal. The author has limited citations.

	Overview of Article
Type of article	Overall Type: Primary Research Study Specific Type: Exploratory descriptive study
APA Reference	Wood, D., & Marshall, E. S. (2010). Nurses with disabilities working in hospital settings: Attitudes, concerns, and experiences of nurse leaders. <i>Journal of Professional Nursing</i> , 26(3), 182-187. <a href="https://doi.org/10.1016/j.profnurs.2009.12.001">https://doi.org/10.1016/j.profnurs.2009.12.001</a>
Abstract	“Nearly 50 million people in the United States live with a disability. People with disabilities are increasingly represented in professional nursing. It is important to understand attitudes and concerns of nurse leaders who hire and work with nurses with disabilities. Using an exploratory descriptive design, this study surveyed nurse managers from 600 hospitals, with responses from 219 participants. Using a modified version of two subscales of the Employer Attitude Questionnaire, nurse managers expressed attitudes toward work performance, reported concerns or perceived abilities of staff nurses with disabilities to work in administrative positions, rated job performance, and described accommodations extended to staff nurses with a broad range of disabilities. Results indicated that most nurse managers rated work performance as exceptional or above average. Concerns included abilities to perform necessary job tasks, patient safety, and acceptance by the public and by coworkers of the nurses with disabilities. There was a significant positive relationship between nurse managers' previous exposure to nurses with disabilities and their willingness to hire nurses with disabilities. Conclusions indicate a need for the discipline to move beyond advocacy and personal case sharing to research on promotion of effective means of recruitment and retention of professional nurses with disabilities” (p. 182)
Author	Danette Wood, RN, EdD, CRN Position and Institution: Georgia Southern University School of Nursing, Associate Professor and Director of Baccalaureate Program Publication History in Peer-Reviewed Journals: Limited (4 publications)
Publication	Type of publication: Peer-Reviewed Journal (Journal of Professional Nursing) Publisher: Elsevier Inc.
Date and Citation History	Date of publication: 2010 Cited By: 33
Stated Purpose or Research Question	“The purpose of this study was to explore attitudes, concerns, and work experiences of nurse managers regarding staff nurses with disabilities” (p. 183).
Author's Conclusion	“Results indicate that nurses with a broad range of disabilities are employed in significant numbers in hospital settings and generally performing well...Second, the size of the hospital and number of nurses employed does not appear to be related to nurse managers' perceptions of job performance of employed nurses with disabilities. Third, previous experience with a nurse with disabilities appears to contribute to positive attitudes toward hiring, advancing, and working with nurses with disabilities. Finally, nurse managers who have past experience with staff nurses with disabilities who have performed well in their jobs are likely to hire other nurses with disabilities into any position, including positions of leadership and positions of direct patient care in an acute hospital setting ” (p. 185).
Overall Relevance to your EBP Question	Overall Relevance of Article: Good Rationale: This article explores the attitudes of health professionals, in this case nurses, towards other health professionals who have disabilities.
Overall Quality of Article	Overall Quality of Article: Moderate Rationale: The author's credentials are highly relevant to the topic, but she has limited publication history. The article was cited 33 times, but is 10 years old.

	<b>Overview of Article</b>
Type of article	Overall Type: Primary Research Study Specific Type: survey research and psychometric analysis
APA Reference	Yi, Y. G., Lee, J.-E., Lee, S. H., Lee, J. Y., Kwon, Y. J., & Shin, H.-I. (2020). Development and validation of a scale to assess the attitude of healthcare professionals toward persons with disability. <i>Clinical Rehabilitation</i> , 34(5), 667–676. <a href="https://doi.org/10.1177/0269215520911968">https://doi.org/10.1177/0269215520911968</a>
Abstract	“Objective: This study aimed to develop and validate an instrument that measures the attitudes of healthcare professionals toward persons with disabilities. Design: The Delphi survey consensus method was used to compose a preliminary questionnaire for survey. Then, healthcare professionals responded to the questionnaire online, and the results were used for psychometric analysis. Setting: Three tertiary hospitals. Subjects: A total of 993 healthcare professionals. Interventions: Not applicable. Main measures: Attitudes of healthcare professionals toward persons with disabilities. Results: A 28-item preliminary questionnaire was initially developed after a two-round Delphi survey with 16 experts. Through an online survey, the final 20 items were categorized as follows: behaviors in clinical situation, knowledge and skills, emotional response, and responsibility of healthcare professionals. The Cronbach's alpha coefficient for the total score was 0.890 and varied between 0.856 and 0.892 in the four subdomains. The newly developed tool showed an acceptable model fit. Healthcare professionals who participated in an education module showed higher scores in behavior and knowledge/skills subdomains than those who did not, whereas participants who had clinical experience with persons with disabilities demonstrated higher scores in emotional response and knowledge/skills subdomains. Conclusions: We developed a scale to measure the attitudes toward persons with disabilities of healthcare professionals. The scale demonstrated a sensitivity to measure a difference by participation in an education module or clinical experience with persons with disabilities.” (p. 667)
Author	Credentials: Unknown Position and Institution: Department of Rehabilitation Medicine, College of Medicine, Seoul National University, Seoul, Republic of Korea Publication History in Peer-Reviewed Journals: moderate
Publication	Type of publication: Scholarly peer-reviewed journals. Publisher :SAGE journals Other: Journal of Clinical Rehabilitation
Date and Citation History	Date of publication: 2020 Cited By: Unknown
Stated Purpose or Research Question	“In this study, we aimed to develop and validate a scale for healthcare professionals: the Attitude toward Persons with Disability in Health Care.” (p.668)
Author's Conclusion	“The scale proposed in this study could be used for education or training programs to improve the attitudes toward persons with disabilities of healthcare professionals. The use of this scale is especially important for rehabilitation institutions which deal with a large number of people with disabilities.” (p.675)
Overall Relevance to your EBP Question	Overall Relevance of Article: Moderate This study provides future implications for use in education and training programs to improve attitudes of healthcare professionals towards individuals with disabilities. However this research does not examine the attitudes of healthcare professionals.
Overall Quality of Article	Overall Quality of Article: Moderate Publication within the last 5 year. Reputable journal. The author is well established but was not cited by other authors.