Attitudes Toward Nursing Students With Disabilities: Promoting Social Inclusion

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ABSTRACT

Background: Nursing education programs rarely refer to individuals with disabilities as potential nursing students; more often, the assumption is that they are patients. Thus, this study aimed to capture nursing students’ perspectives of social inclusion through examination of their attitudes toward nursing student colleagues with disabilities.

Method: Paper-and-pencil structured surveys containing two validated scales were collected from Israeli nursing students (N = 270). Analyses included measuring associations using Pearson’s correlation coefficient and general linear regression models.

Results: Nursing students held relatively negative attitudes toward colleagues with disabilities, and these negative attitudes were correlated to attitudes toward people with disabilities in general, even after adjusting for noted confounders.

Conclusion: Nurse educators and nursing students should be aware of prejudicial attitudes toward their respective communities toward nursing student colleagues with disabilities, and they should work toward a better understanding that cultural competence and awareness extends not only to patients but also to one’s colleagues.

Cultural competence connotes the goal of health care professionals to provide care to people with diverse values, beliefs, and behaviors, as well as to tailor services to meet consumers’ social, cultural, and linguistic needs (Betancourt, Green, & Carrillo, 2002). With continuing diversity in populations, nursing associations have required the inclusion of cultural content in nursing curricula since the end of the 1970s (Caffrey, Neander, Markle, & Stewart, 2005; Giger et al., 2007). Frequently, the thrust of cultural awareness and striving toward cultural competence focuses on improving treatment for patients. However, the concept of cultural competence should apply to the patient as well as to colleagues and include the full breadth of other cultural contexts, such as the situation of having a disability, rather than solely ethnicity or race (Campinha-Bacote, 2002).

CULTURAL COMPETENCE, SOCIAL INCLUSION, AND DISABILITY

Nursing education advocates cultural awareness toward individuals who differ by ethnicity or race, religion, social class, or ability or disability status, and aims to provide culturally competent treatment (Betancourt et al., 2002). However, cultural competence often is restricted to the nurse–patient relationship, omitting relationships among nurses themselves. Thus, nurse educators have the challenge of encouraging diverse populations of students to apply their education on cultural competence to their professional and collegial relationships.

Furthermore, nurse leaders who apply the concept of cultural awareness into the nursing community should also examine barriers to the social inclusion of nursing students or nurses from various backgrounds (Northam, 2009; Wolff, Ratner, Robinson, Oliffe, & Hall, 2010). Inclusion or inclusivity is the process of intentionally promoting a positive, engaging, strong, and socially cohesive community for those who may be vulnerable to discrimination on the basis of their race or ethnicity, religion, age, gender, disability status, socioeconomic status, or sexual orientation (Read, Vessey, Amar, & Cullinan, 2013). Yet, even in documents supporting inclusivity for all aspects of diversity, the tendency is to focus on a single dimension—ethnicity and
race (Milem, Chang, & Antonio, 2005). Expanding diversity and promoting inclusion of individuals with disabilities who could potentially become nursing students, faculty, and professionals are goals that the nursing community should strive for (National League for Nursing, 2016).

INCLUSION OF STUDENTS WITH DISABILITIES IN NURSING EDUCATION

Recently, the nursing community has increasingly called for the need to integrate disability-related content in nursing curricula to understand the needs of people with disabilities and accordingly provide quality and sensitive medical care to this population (Smeltzer, Blunt, Marozsan, & Wetzel-Effinger, 2015; Smeltzer, Dolen, Robinson-Smith, & Zimmerman, 2005; Smeltzer, Robinson-Smith, Dolen, Duffin, & Al-Maqbali, 2010). Despite this emerging change, especially in nursing education in the United States, considerable need exists for global improvement of health care education to provide adequate and balanced information about disabilities (Seccombe, 2007; Shakespeare, Iezzoni, & Groce, 2009; Smeltzer et al., 2015; Thompson, Emrich, & Moore, 2003) and a culturally informed biopsychosocial perspective on how to relate to individuals with disabilities (World Health Organization, 2001). Furthermore, despite the interest in providing more balanced information and attention to people with disabilities, the focus has been on patients with disabilities and not on colleagues with disabilities. Individuals with disabilities have been underrepresented in nursing education and practice (National League for Nursing, 2016), as well as in nursing literature (Doe, 2003). Prejudicial attitudes and public stigma toward people with disabilities may prevent individuals with disabilities from gaining nursing education or maintaining in the nursing profession (Carroll, 2004; Maheady, 2004; Neal-Boylan, Fennie, & Baldauf-Wagner, 2011).

Disability has been defined by the International Classification of Functioning, Disability and Health (ICF) as a multidimensional (i.e., biological, psychological, social and environmental) and universal phenomenon that considers the individual within the context of the environment as part of the one’s health continuum (World Health Organization, 2001). Accordingly, disability can be acquired from birth or by injury in the workplace, as reported by nurses who became disabled (Maheady, 2006). Therefore, it is important to promote nursing students’ awareness to the needs of colleagues with disabilities (Marks, 2007; Moore, 2004; Storr, Wray, & Draper, 2011).

The enactment of the Americans With Disabilities Act (ADA) of 1990 has provided individuals with disabilities an opportunity to integrate in any profession, including the health care professions. Despite this legal protection, societal attitudes continue to separate people with disabilities in education and workplace (Chan, McMahon, Cheing, Rosenthal, & Bezyak, 2005; Rao, 2004). There is a bias inherent in the nursing profession, which views the work of nurses as so physically and mentally challenging that individuals with disabilities would be incapable of becoming good nurses and providing safe care to patients (Carroll, 2004). As a result, qualified potential nurses (individuals with disabilities) are being blocked by social barriers, such as prejudicial attitudes, from the nursing profession (Marks, 2000); consequently, students with disabilities are still a minority group in nursing education and practice (Doe, 2003).

No consensus exists about the definition of attitudes; however, researchers agree that it contains affective and cognitive components (Livneh & Antonak, 2000; Rao, 2004). Attitudes also contain a behavioral component, meaning that individuals’ ideas, thoughts, perceptions, beliefs, and emotions toward another have an impact on their behaviors (Fishbein & Ajzen, 2005). Accordingly, nurses’ and other health professionals’ attitudes influence their clinical practice (Woloschuk, Harasym, & Temple, 2004). Research has found that the negative attitudes of health professionals, including nurses, toward people with disabilities are a primary reason why they do not access health care services (Arvaniti et al., 2009; Drainoni et al., 2006; Smeltzer, 2007; Tervo & Palmer, 2004).

Although there has been research on the attitudes of health care professionals such as nursing students and RNs toward patients with disabilities (Al-Abdulwahab & Al-Gain, 2003; Au & Man, 2006; Linden & Kavanagh, 2012; Sahin & Akyol, 2010; Tervo, Azuma, Palmer, & Rednius, 2002; Tervo & Palmer, 2004; Woloschuk et al., 2004), only a few studies have focused on the attitudes of nurses toward nursing colleagues with disabilities (Matt, 2008; Wood & Marshall, 2010). To our knowledge, there has been no research on the attitudes of nursing students toward nursing student colleagues with disabilities; therefore, it is important to further explore attitudes in the early stages of the nursing education (i.e., how nursing students perceive potential peers disabilities). Such research will enable nurse educators to expand the concepts of cultural competence, diversity, and social inclusion toward groups of students other than ethnic groups, such as students with disabilities. The current study addresses this aim by examining the attitudes of Israeli nursing students toward nursing student colleagues with physical disabilities. This study focused on attitudes toward nursing colleagues with visible physical disabilities, as prejudice may prevent equal participation of individuals with physical or mobility disabilities who are able and qualified to work in the nursing profession (Arndt, 2004; Fischer & Martinez, 2013; Wood & Marshall, 2010). The focus of the current study is on physical or mobility disability as the most frequent type of disability among people with disabilities in the world (World Health Organization, 2001), as well as in Israel (i.e., the target population) (Barlev, Keren-Abraham, Haber & Admon-Rick, 2015).

NURSES’ ATTITUDES TOWARD PEOPLE WITH DISABILITIES

It has been hypothesized that nurses hold positive attitudes toward people with disabilities due to the values of caring, sensitivity, and empathy that are part of the core of the nursing profession (Olsen, 1991); however, results from studies on nurses’ attitudes toward people with disabilities have been ambiguous. Several studies found that nursing students and RNs held positive attitudes toward people with disabilities (Al-Abdulwahab...
& Al-Gain, 2003; Chenoweth, Pryor, Jeon, & Hall-Pullin, 2004; Sahin & Akyol, 2010; Ten Klooster, Dannenberg, Taal, Burger, & Rasker, 2009), whereas a second group of studies indicates that nursing students and RNs hold negative attitudes toward people with disabilities (Arvaniti et al., 2009; Matziou et al., 2009; Packer, Iwasiw, Theben, Sheveleva, & Metrofanova, 2000; Smeltzer, Avery, & Haynor, 2012). Tervo and Palmer (2004) revealed that health professional students had more negative attitudes toward individuals with disabilities, compared with the general population. Among the various groups of students in health care–related professions (i.e., medical students, physical and occupational therapy students, communication disorder and audiology students, and psychology students), nursing students hold the most negative attitudes.

Most of the above studies focused on attitudes of nursing students and RNs toward patients with disabilities. Only recently have scholars (Arndt, 2004; Ashcroft et al., 2008; Carroll, 2004; Maheady, 2004, 2006; Matt, 2008; Neal-Boylan & Guillett, 2008; Neal-Boylan, 2012; Neal-Boylan et al., 2011; Wood & Marshall, 2010) expanded this discourse to nursing colleagues with disabilities (i.e., individuals who entered nursing training program or practice with a congenital or acquired disability). Nurses with disabilities reported encountering social and physical barriers when their disability was disclosed.

For example, Neal-Boylan and Guillett (2008) conducted semistructured interviews with nurse recruiters and RNs who had a disability to elicit descriptive information about the experience of being an RN with a disability. Content analysis revealed physical and social barriers (e.g., stigma and lack of awareness about how to work with or support a person with a disability) for RNs with congenital and acquired disabilities. Nurses with disabilities described efforts to hide their disabilities until they no longer could, whereas nurse recruiters described not having knowingly interviewed nurses who had disabilities. In addition, nurses with disabilities were surprised to learn that previously supportive colleagues and administrators no longer supported them in their professional roles after they revealed their disabilities.

Previous studies exploring attitudes toward nursing colleagues with disabilities, as described above, have several research limitations. First, the majority of those studies are qualitative case studies and anecdotal narratives. Second, it is not clear whether the measured attitudes referred to individuals with disabilities who entered the nursing profession or nurses who became disabled during their education or practice (congenital versus acquired disability). Third, few studies focus on attitudes toward nurses with disabilities and not nursing students with disabilities. Research on attitudes of nursing students toward nursing student colleagues with (congenital) disabilities is lacking. Following the humanistic and social model of disability that emphasizes the capabilities and strengths of the individual, as well as the social barriers that prevent full participation of individuals with disabilities in the community life (Longmore, 2003; Shakespeare, 2005), it is important to address negative attitudes and to promote cultural competence and inclusion of nursing students with disabilities. The current study aimed to measure nursing students’ attitudes toward nursing student colleagues with disabilities and to examine its association with attitudes toward people with disabilities, in general.

**METHOD**

**Research Questions**

Research questions used in the current study included:

- What attitudes do nursing students hold toward nursing student colleagues with congenital physical or mobility disabilities?
- Do nursing students perceive nursing student colleagues with disabilities differently from, or the same as, patients with disabilities?

**Hypotheses**

It was hypothesized that nursing students hold relatively negative attitudes toward nursing student colleagues with disabilities based on previous studies indicating that (a) nurses and nursing students hold negative attitudes toward people with disabilities (Arvaniti et al., 2009; Matziou et al., 2009; Packer et al., 2000; Smeltzer et al., 2012; Tervo et al., 2002; Tervo & Palmer, 2004), (b) the common perception that individuals with disabilities are incapable of providing safe care to patients (Carroll, 2004), and (c) the reported negative experiences of nurses with disabilities (Maheady, 2004, 2006; Neal-Boylan, 2012).

The second hypothesis was that an association exists between nursing students’ attitudes toward peers with disabilities and patients with disabilities, meaning that they perceive people with disabilities in the same way, whether they are nursing student colleagues with disabilities or patients with disabilities. Due to the fact that the current nursing curricula discuss cultural competence in the context of patients, it was assumed that nursing students’ attitudes toward colleagues with disabilities would be related to attitudes toward patients with disabilities.

**Design**

A cross-sectional study was conducted using paper-and-pencil structured surveys that were collected from Israeli nursing students over a 4-month period.

**Participants**

The data were collected from convenience samples of nursing students at two Israeli institutions of higher education (N = 347). The overall survey completion rate was 76.9% (N = 270). To detect differences between institutions, comparisons were made regarding the demographic variables of the students (i.e., gender, marital status, socioeconomic status) and the completion rates. Because none were found, the two samples were combined for data analyses.

**Measures**

The Attitude Toward Disabled Persons (ATDP) scale, which is well-known and commonly used (Yuker, Block, & Young, 1970), was used to measure the attitudes of nursing students toward people with disabilities, in general. The ATDP, containing 30 items about individuals with disabilities rated on a 6-point Likert-type scale, has been used in several
ATTITUDES TOWARD STUDENTS WITH DISABILITIES

TABLE 1
The Scenario Presented in the Multidimensional Attitudes Scale Toward Persons With Disabilities (MAS)

Michelle is a nurse in a public hospital. Every day, she has lunch with her peers at the hospital cafeteria. Last Monday, at the end of their lunch, a little man (dwarfism) who uses a cane entered the cafeteria. One of Michelle’s peers knew this man—David, a nursing student—and introduced him to the others who were sitting around the table, including Michelle. Afterward, the nursing peers said goodbye to each other and went back to their wards, except for Michelle and David, who stayed sitting next to each other. Michelle had 15 minutes until the meeting she scheduled with a physician.

Instructions to the participants:
Try to imagine the situation of Michelle. How would she feel/think/behave toward David?
(The participants are given a list of emotions/thoughts/behaviors and have to rate each on a 5-point scale).

countries, with a reported Cronbach’s alpha of .70 or above (Matziou et al., 2009; Ten Klooster et al., 2009). Higher scores indicated more negative perceptions toward people with disabilities. Given that the ATDP contains general statements about people with disabilities, it may be perceived as referring to patients, and the majority of the studies using ATDP to measure attitudes of health care professionals, including nurses, toward people with disabilities did refer to patients (Chan, Lee, Yuen, & Chan, 2002; Matziou et al., 2009; Seccombe, 2007; Tervo et al., 2002; Tervo & Palmer, 2004). Therefore, a newer scale called the Multidimensional Attitudes Scale Toward Persons With Disabilities (MAS) was used to measure attitudes toward nursing student colleagues with disabilities (Findler, Vilchinsky, & Werner, 2007). As with the ATDP scale, higher scores indicated more negative perceptions toward nursing colleagues with disabilities. However, the MAS, as opposed to the ATDP scale, is a relatively flexible measure that enables the exploration of attitudes toward different target populations through vignettes. The MAS has a framework that enables investigators to create a scenario related to a nursing student with a disability and to indirectly capture the respondents’ attitudes to the situation presented in the vignette, as described below.

The MAS presents a scenario vignette that describes an interaction between two individuals, one who is disabled person and one who is not. Respondents then are asked to read a series of statements and indicate the degree to which they believed the statement reflected the way the non-disabled person in the story would feel, think, or behave in that situation (Findler et al., 2007; Vilchinsky, Findler, & Werner, 2010). The MAS, with a reported Cronbach’s alpha of .83 to .90 for the three subscales (thoughts, emotions, and behaviors), contained 26 items (the original version included 34 items) rated on a 5-point Likert-type scale. A scenario was developed for the current study that describes a meeting in a hospital cafeteria between two nurses; one is an individual with dwarfism who is a nursing student using a cane and considered by the ADA (1990, 2008) as a person with a physical impairment (i.e., “any physiological disorder or condition, cosmetic disfigurement, or anatomical loss affecting one or more body systems”), and the other is a nurse without a disability (Table 1).

As recommended by the developers of this scale (Findler et al., 2007), the scenario vignette in the MAS was described in a third-person pronoun to enable respondents to project their own emotions, thoughts, and behaviors onto the given situation.

Furthermore, the survey included 18 demographic questions that collected information about the respondent’s background, such as gender, date of birth, country of birth (immigrant or not), marital status, working status, socioeconomic status, whether any family member had a disability (and, if so, the amount of time the respondent provided assistance to that family member), and whether the respondent had a disability (and, if so, type of disability, congenital or acquired, and influence on daily activities).

TABLE 2
Demographic Characteristics and Instrument Scores for Nursing Students (N = 270)

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>% (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>26.3 (71)</td>
</tr>
<tr>
<td>Female</td>
<td>73.7 (199)</td>
</tr>
<tr>
<td>Age (y)</td>
<td></td>
</tr>
<tr>
<td>&lt;24</td>
<td>50 (136)</td>
</tr>
<tr>
<td>24-29</td>
<td>45.2 (122)</td>
</tr>
<tr>
<td>30-35</td>
<td>4.4 (12)</td>
</tr>
<tr>
<td>Single marital status</td>
<td></td>
</tr>
<tr>
<td></td>
<td>85.5 (230)</td>
</tr>
<tr>
<td>Income level below average</td>
<td></td>
</tr>
<tr>
<td></td>
<td>25.9 (63)</td>
</tr>
<tr>
<td>Year as university student*</td>
<td></td>
</tr>
<tr>
<td>First</td>
<td>25.4 (65)</td>
</tr>
<tr>
<td>Second</td>
<td>25.8 (66)</td>
</tr>
<tr>
<td>Third</td>
<td>30.1 (77)</td>
</tr>
<tr>
<td>Fourth</td>
<td>18.8 (48)</td>
</tr>
<tr>
<td>Currently working</td>
<td></td>
</tr>
<tr>
<td></td>
<td>45.5 (121)</td>
</tr>
<tr>
<td>Family member has disability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>28.5 (75)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Instrument Scores</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Toward Disabled Persons scale</td>
<td>65.28 (8.60)</td>
</tr>
<tr>
<td>Multidimensional Attitudes Scale Toward Persons With Disabilities</td>
<td></td>
</tr>
<tr>
<td>Thoughts</td>
<td>3.60 (0.73)</td>
</tr>
<tr>
<td>Emotions</td>
<td>2.44 (0.62)</td>
</tr>
<tr>
<td>Behaviors</td>
<td>1.83 (0.81)</td>
</tr>
</tbody>
</table>

* Missing data for students (n = 14).
Data Collection

In addition to the consent form, the questionnaire included demographic variables (e.g., gender, year of birth, marital status, employment status, and having a family member with a disability) and two scales on attitudes toward people with physical or mobility disabilities: the ATDP scale (Yuker et al., 1970) and the MAS (Findler et al., 2007). The entire procedure (i.e., introduction of the study, obtaining consent, and disseminating and collecting the questionnaires) took approximately 20 minutes.

Ethical Considerations

The survey and consent form were approved by the Ethics Committee of the Faculty of Social Welfare and Health Sciences at the authors’ university. Permission was obtained by faculty to administer the surveys to nursing students attending class who agreed to participate in the study.

Data Analyses

SAS® version 9.3 software was used for data analyses. Frequencies are provided for categorical variables, and means (M) and standard deviations (SD) are provided for continuous variables. Pearson’s correlation coefficient was used to assess the correlations between the ATDP and MAS scores, and Cronbach’s alpha was used to measure the reliability of the scales. General linear regression models were used to examine correlations between the ATDP scale (attitudes toward disabled people in general) and each of the three MAS subscales (i.e., emotions, thoughts, behaviors [attitudes toward disabled nursing student colleagues]) while adjusting for known confounders such as gender, age, and having a family member with a disability. Adjusted $R^2$ values (adj. $R^2$), $F$ values, and model and error degrees of freedom (df) are presented to indicate model fit. Significance was declared at $p < .05$.

RESULTS

The study sample was composed of nursing students ($N = 270$), the majority (97%) of whom were undergraduate students. As indicated in Table 2, nearly 74% of the sample comprised women, half of the sample was younger than 24 years of age ($M = 24.1$, $SD = 2.96$), most were not married, and most reported earnings at or above the average income level. Nursing students have 4 years of education at the university, and there was approximately equal representation of each year in the sample. Less than half of the nursing students were working, and more than a quarter reported having a family member with a disability. The mean MAS scores, especially thoughts and emotions, indicated that the respondents hold relatively negative attitudes toward colleagues with disabilities.

The mean ATDP score in the present sample ($M = 65.28$, $SD = 8.60$) was comparable to other samples of nursing students in the United States, China, and Greece (Figure). MAS scores (Thoughts: $M = 3.40$, $SD = 0.73$; Emotions: $M = 2.44$, $SD = 0.62$; Behaviors: $M = 1.83$, $SD = 0.81$) were comparable to those previously published (Findler et al., 2007).

Cronbach’s alpha was used to examine the reliability of all scales and scale components (Table 3). The ATDP in the current sample demonstrates acceptable reliability (Cronbach’s alpha = .622), whereas the three MAS scales achieved very good reliability (Cronbach’s alpha > .800).

Pearson’s correlation coefficients were used to compare the ATDP score, measuring attitudes toward disabled persons, and the MAS scores, measuring the thoughts, emotions, and behav-
Iors toward disabled nursing student colleagues (Table 4). Significant correlations were found between the ATDP with MAS–Thoughts (p < .001) and with MAS–Emotions (p < .001), but not with MAS–Behaviors. In addition, correlations between all MAS components were significant (p < .001).

General linear models for each MAS subscale (i.e., MAS–Thoughts, MAS–Emotions, MAS–Behaviors) were used to examine whether the ATDP score (attitudes toward disabled people in general) was correlated to thoughts (MAS–Thoughts), emotions (MAS–Emotions) and behaviors (MAS–Behaviors) toward disabled nursing student colleagues, after adjusting for known confounders such as demographic characteristics (i.e., age, earnings), years of university education (i.e., first through fourth), and having a disabled family member or not (Table 5). In the models predicting MAS–Thoughts and MAS–Emotions, a positive association was found with the ATDP score (p < .001); however, none of the other variables contributed to the model. In the model predicting MAS–Behaviors, neither ATDP nor the other variables demonstrated any association. Even so, all three regression models predicting MAS scales explained little variance as indicated by the adjusted $R^2$ values of less than 10% (Table 5).

**DISCUSSION**

The current study examines the attitudes of nursing students toward nursing student colleagues with physical disabilities. It was hypothesized that nursing students would have negative attitudes toward nursing student colleagues with disabilities. The findings supported this hypothesis, as well as the belief that health care professionals, especially nurses, have biased preconceptions that individuals with disabilities are incapable of becoming nurses (Carroll, 2004; Tervo & Palmer, 2004; Wood & Marshall, 2010). This finding is consistent with narratives in the literature of negative experiences provided by nurses with disabilities (Maheady, 2004, 2006; Neal-Boylan, 2012).

Second, it was hypothesized that nursing students perceive all people with disabilities the same, whether they are nursing student colleagues or patients. The findings supported this hypothesis showing that nursing students’ attitudes toward people with disability and toward colleagues with disabilities were associated, and that these attitudes both were relatively negative (Matt, 2008; Matziou et al., 2009; Neal-Boylan & Guillett, 2008; Smeltzer et al., 2012).

One explanation may be that nurses who have negative attitudes toward people with disabilities could not foresee the possibility of having a colleague with disability (Carroll, 2004; Matt, 2008). Following the concept of cultural competence applied in nursing education within the context of patients (Betancourt et al., 2002), it seemed that the nursing students who had poor attitudes toward individuals with disabilities (Hergenrather & Rhodes, 2007) would similarly hold the attitude of “not in my backyard,” meaning they were not willing to promote inclusion of individuals with disabilities in their own professional community.

Previous studies indicated that attitudes toward people with disabilities differ by gender (Laws & Kelly, 2005; Panek & Junger, 2008; Vilchinsky, Werner, & Findler, 2010) and having close contact or a personal experience with a disabled individual (Ouellette-Kuntz, Burge, Brown, & Arsenault, 2010; Ten Klooster et al., 2009; Yunker, 1988). These confounders are not associated with attitudes toward disabled nursing student colleagues in the current study.

Another finding was that the ATDP scale is correlated with only two subscales of the MAS—Thoughts and Emotions (not
 Behaviors). This finding was also observed in the models predicting thoughts and emotions (MAS) toward disabled colleagues by the attitudes toward disabled persons (ATDP). This finding demonstrates the distinction between implicit attitudes (i.e., preferences that exist outside of conscious awareness), as reflected in the component of thoughts and emotions, and explicit attitudes, as reflected in the component of behaviors (Wilson, Lindsey, & Schooler, 2000). It supports the interrelationship and dependency between the two psychological entities of thoughts and emotions (Lazarus, 1982). This finding may be explained by the fact the ATDP scale includes items that measure only perceptions (implicit attitudes) and not behaviors (explicit attitudes), whereas the MAS uses a multidimensional scale consisting of the three components of attitude—affective, cognitive, and behavioral (Findler et al., 2007). It should be noted that the findings of the current study do not support the original study of the MAS subscales, which reported positive correlations between the ATDP and MAS—Emotions and MAS—Behaviors (Findler et al., 2007).

CONCLUSIONS AND IMPLICATIONS

The findings of the current study indicating that nursing students held similarly negative attitudes toward nursing student colleagues with disabilities, as well as toward other people with disabilities, emphasize the need to promote cultural competence in nursing education, not only toward patients of all cultures and types of diversity, including those with disabilities, but also toward colleagues with disabilities. Such practice is consistent with the goal of cultural competency that encourages the understanding of diversity and social inclusion. Individuals with disabilities can become nurses if the nursing community strives to minimize social barriers such as prejudicial attitudes in early stages of nursing education and provide them an opportunity to gain nursing education. Nurse educators should expand the interpretation and implementation of cultural competence in the nursing curricula in a way that includes students from various backgrounds, including students with disabilities. Through adherence to the ADA requirements (2008), the nursing community has begun to provide reasonable physical accommodations for individuals with disabilities in education and practice, as indicated also in a new model of technical standards inclusive of nursing students with disabilities, developed for the California Committee on Employment of People with Disabilities (Marks & Ailey, 2014). Still, the findings of the current study emphasize the need to also consider social barriers, such as stigma, in a way that will enable individuals with disabilities to gain nursing education and become strong, compassionate, and competent nurses.

LIMITATIONS AND FUTURE RESEARCH

This study has limitations that should be addressed in future research. First, the study focused only on one type of disability (physical/mobility disability). Future research should also explore the attitudes toward nursing students with other disabilities, such as sensory impairments or mental disabilities. Second, the scenario vignette in the MAS was described using a third-person pronoun to enable respondents to project their own emotions, thoughts, and behaviors onto the given situation, as recommended by the developers of this scale (Findler et al., 2007). However, it is possible that perceptions on how others might react toward nursing student colleagues with disabilities may differ from one’s own perceptions. Future research should ask the respondents of MAS to report their own perceptions (i.e., framing the scenario vignette in a first-person pronoun). In a future study, it would be also interesting to compare the attitudes of nursing and nonnursing students toward colleagues with disabilities.

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