CJNR 2012, Vol. 44 N° 3, 18–43

Résumé

Une recherche de synthèse sur les attitudes du personnel infirmier à l'égard des lesbiennes, gais, bisexuels et transgenres

Caroline Dorsen

Un nombre croissant d'études suggèrent que les lesbiennes, gais, bisexuels et transgenres (LGBT) vivent des disparités importantes en matière de santé par rapport aux hétérosexuels. Les raisons de cette situation sont complexes et multifactorielles. Un domaine de la recherche sur ce sujet examine en particulier les attitudes négatives réelles ou perçues des fournisseurs de soins de santé. La présente recherche de synthèse a comporté l'évaluation critique et la synthétisation des données tirées de 17 articles traitant des attitudes des infirmières et des infirmiers envers les patients LBGT. Toutes les études analysées faisaient état de certaines attitudes négatives. La littérature révèle toutefois des limites importantes, notamment le manque d'études bien conçues et d'études qualitatives; l'utilisation inégale d'instruments validés et fiables; et le manque de mesures examinant les attitudes envers les lesbiennes, bisexuels et transgenres. Plus de connaissances dans ce domaine pourraient permettre la mise en œuvre d'interventions pour améliorer la compétence culturelle du personnel infirmier; l'allocation de ressources à la recherche en sciences infirmières, à l'éducation et aux services liés à la santé des personnes LGBT; et l'inclusion de plus de contenu LGBT dans les programmes d'études en sciences infirmières.

Mots clés : attitudes du personnel infirmier, LGBT, disparités en matière de santé, recherche de synthèse

CJNR 2012, Vol. 44 N° 3, 18–43

An Integrative Review of Nurse Attitudes Towards Lesbian, Gay, Bisexual, and Transgender Patients

Caroline Dorsen

A growing body of literature suggests that lesbian, gay, bisexual, and transgender (LGBT) persons have significant health disparities as compared to heterosexuals. Although the reasons for this are complex and multifactorial, one area of research has examined the real or perceived negative attitudes of health-care providers. This integrative review critically appraises and synthesizes data from 17 articles regarding nurses' attitudes towards LGBT patients. Every study analyzed showed some evidence of negative attitudes. However, the literature revealed major limitations, including a paucity of well-designed studies; a dearth of qualitative studies; inconsistent use of validated, reliable instruments; and a lack of measures examining attitudes towards lesbian, bisexual, and transgender persons. Increased knowledge in this area could lead to interventions to improve nurses' cultural competency; resource allocation to nursing research, education, and services related to LGBT health; and inclusion of more LGBT content in nursing curricula.

Keywords: nurse attitudes, LGBT, homosexuality, health disparities, integrative review

Introduction

In the past three decades, a growing body of literature has shown that lesbians, gay men, bisexuals, and transgender individuals (LGBT) experience significant health-care disparities as compared to heterosexuals (Dilley, Simmons, Boysun, Pizacani, & Stark, 2009; Institute of Medicine [IOM], 2011; Solarz, 1999). The reasons for these disparities are complex and multifactorial, ranging from socio-economic discrepancies to individual risk-taking behaviours (Solarz, 1999). One area of interest has been health-care systems, including the possible role of negative attitudes on the part of health-care providers (Hutchinson, Thompson, & Cederbaum, 2006; IOM, 2011). Real or perceived homophobia among health-care providers may contribute to LGBT persons avoiding health-care providers; not revealing their sexual orientation to providers and thus not receiving individualized, evidence-based care; and/or not following the recommendations of providers, fearing that these may be fuelled in part by homophobia (Diamont, Wold, Spritzer, & Gelberg, 2000; Heck, Sell,

& Gorin, 2006; IOM, 2011). These factors may, in turn, contribute to poor individual health outcomes among LGBT persons as well as population-level health-care disparities.

Background and Significance

LGBT Health-Care Needs

The health of sexual minorities is a relatively new area of study. Although some research was done as early as the 1940s, most of the early literature is focused on the etiology of homosexuality and/or on homosexuality as a mental health pathology (Tully, 1995). The AIDS epidemic of the 1980s brought some of the unique health-care needs of the gay community into the spotlight but also led to increased homophobia and discrimination (Douglas, Kalman, & Kalman, 1985). Concurrent with the robust body of literature growing around the unfolding and evolving global HIV/AIDS crisis, a body of literature was being developed in the 1980s regarding a possible increased breast cancer risk in lesbian women (Gay and Lesbian Medical Association [GLMA], 2001). This continues to be an area of interest and study (Cochran et al., 2001).

In many other areas, however, there is still a dearth of literature (Gee, 2006; IOM, 2011; Solarz, 1999). The research that does exist suggests that LGBT persons experience health disparities on many of the leading US health indicators (GLMA, 2001; IOM, 2011; Mayer, Bradford, Makadon, Goldhammer, & Landers, 2008; Solarz, 1999), including substance abuse; overweight and obesity; tobacco use; mental health issues, including depression, anxiety, and suicidality; domestic and community violence; and certain cancers (Dean et al., 2000; Mayer et al., 2008).

Nurse Attitudes

The International Congress of Nurses (2006) code of ethics states explicitly that nurses must not discriminate: "... inherent in nursing is respect for human rights, including cultural rights, the right to life and choice, to dignity and to be treated with respect. Nursing care is respectful of and unrestricted by considerations of age, colour, creed, culture, disability or illness, gender, sexual orientation, nationality, politics, race or social status." However, nurse attitudes are a reflection of societal attitudes, including sexism, racism, classism, and homophobia (Giddings & Smith, 2001). Thus some nurses may struggle to reconcile their personal attitudes and beliefs about LGBT persons with their professional responsibility to provide care. A small but growing international body of literature is examining nurse attitudes towards sexual minority patients in an effort to objectively gauge this phenomenon and its potential impact on LGBT health.

Aim of the Literature Review

An integrative review is a rigorous research methodology for examining, critiquing, and synthesizing literature on a specific topic in order to advance science and knowledge (Whittemore & Knafl, 2005). The purpose of the present integrative review was to summarize the current state of knowledge regarding nurse attitudes towards LGBT patients. Although the review was not grounded in a theoretical framework per se, the conceptualization of the study and interpretation of the data were filtered through a social ecological lens that considers the multiple layers of influence on attitudes and behaviours (Bronfenbrenner, 1979).

Design: Data Evaluation and Analysis

The goal of an integrative review is to present a "thorough and unbiased interpretation of primary sources, along with an innovative interpretation of the evidence" (Whittemore & Knafl, 2005, p. 550). The studies included in this review were critically appraised using the methodology of Polit and Beck (2009) and the Critical Skills Appraisal Programme (Milton Keynes Primary Care Trust, 2004). Data were extracted using a systematic method (Polit & Beck, 2009) and placed in an organizational matrix to facilitate "visualization of patterns and relationships" (Whittemore & Knafl, 2005, p. 551).

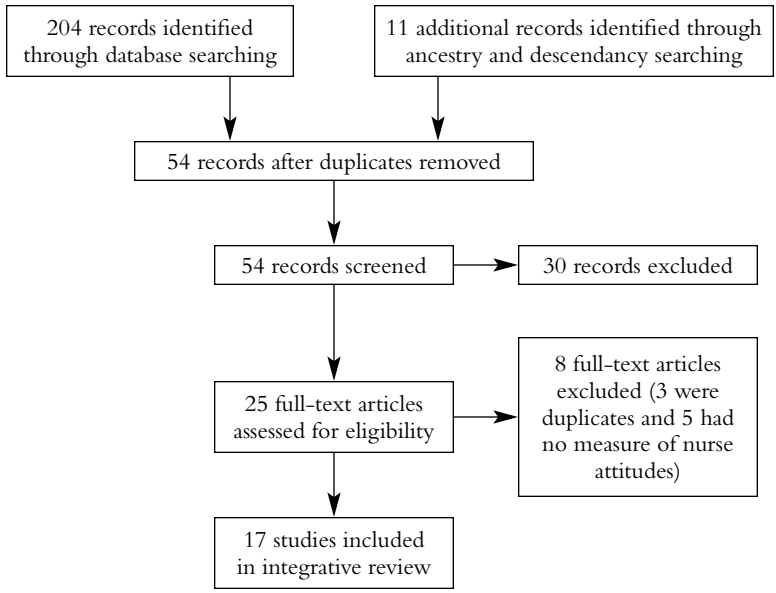
Literature Search

The objectivity and accuracy of an integrative review depends on the rigour of the methods used, including the transparency and reproducibility of the literature search (Ganong, 1987; Polit & Beck, 2000; Whittemore & Knafl, 2005). The method used for this review followed the guidelines of Whittemore and Knafl (2005) and is presented in Figure 1.

Following consultation with a health librarian, a search was conducted of the electronic databases PubMed, Web of Science, PsycInfo, and the Cumulative Index to Nursing and Allied Health Literature (CINAHL) using literature-identified search terms and medical subject headings (MESH) terminology. Various combinations of the following terms were used: homophobia, homosexuality, homosexuality (attitudes toward), gay, lesbian, bisexual, transgender, transsexual, sexual minority, nurse (truncated to include nurse, nurses, nursing, and nurse practitioner), health professional, health professional (attitudes of), discrimination, prejudice.

The inclusion criteria for this integrative review were as follows: quantitative, mixed-method, and qualitative primary research studies, English only, published between 1990 and 2010 on the topic of nurse attitudes towards LGBT patients, correlates of attitudes towards LGBT

Figure 1 ***Literature Search Method***



Source: Moher, Liberati, Tetzlaff, Altman, and the PRISMA Group (2009).

patients, and sequelae of nurse attitudes towards LGBT patients. As per Whittemore and Knafl (2005), unpublished manuscripts and abstracts were excluded from the review. Also excluded were articles pertaining to undergraduate nursing students, articles exploring patient perceptions of nurse attitudes towards LGBT patients, and articles describing the attitudes of health professionals other than nurses towards LGBT patients.

Search Results

The initial search identified 204 studies (see Figure 1). An additional 11 studies were identified for inclusion via ancestry and descendancy searching, as recommended by Polit and Beck (2009) and Whittemore and Knafl (2005). When duplicates were removed, the total number of relevant articles was reduced to 54. Titles and abstracts were then read and evaluated for relevancy to the topic and for fit with the inclusion and exclusion criteria. This resulted in 25 possible studies for inclusion. Following a reading of the full text of each study, seven quantitative articles were excluded either because they were duplicate publications of other studies in the review and offered no new data for consideration

(three) or because they did not include measures of attitudes towards LGBT patients (four). As well, the only qualitative study identified was excluded because it was primarily a study of nurse attitudes towards patients with AIDS and contained only two sentences on attitudes towards homosexuality. It is important to note that there is a robust body of literature exploring nurse attitudes towards people living with HIV/AIDS. Studies in this area of inquiry were included only if attitudes towards homosexuality was a major focus of the study. The final sample comprised 17 articles on nurse attitudes towards LGBT patients, representing 15 quantitative studies and two mixed-methods studies.

Results

Nurse Attitudes Towards LGBT Patients

Overall attitudes. Results from studies in this review suggested that nurse attitudes towards sexual minority patients range from majority negative or very negative to generally positive (see Table 1). However, some studies equated individual or population instrument mean scores to overall levels of homophobia, whereas others simply reported descriptive frequencies, with little guidance on their interpretation and meaning. Therefore, descriptive statistics are presented as being "positively leaning" (i.e., attitudes towards LGBT patients are more positive than negative) or "negatively leaning" (i.e., attitudes are more negative than positive) based on mean scores on attitudinal instruments and researcher conclusions, in an effort to examine patterns and themes found in the literature.

As part of a larger cross-sectional, comparative study of attitudes towards AIDS among rural nurses, Koch, Preston, Young, and Wang (1991) surveyed 731 rural US nurses using the Nurses' Attitudes About AIDS Scale. This instrument has three subscales, including one on attitudes towards male homosexuality (Cronbach's alpha 0.95; no other validity or reliability information reported). The mean score for the homophobia subscale showed a general attitude that appears more positive than negative. However, examination of the responses to the individual questions on the survey reveals that only 27% of the sample agreed that "homosexual men are a viable part of our society," 32% were "disgusted when I consider the state of sinfulness of male homosexuality," and 40% thought that "male homosexuality is obscene and vulgar." The researchers concluded that the majority of their sample held negative views about homosexuals.

Smith (1993) concluded that the majority of respondents in a sample of 250 randomly selected US psychiatric nurses showed evidence of moderate or severe homophobia as measured using the Index of Attitudes Toward Homosexuals (Ricketts & Hudson, 1980). This instru-

Table 1 *Summary of the Literature*

Author/ Year	Purpose	Design	Setting/ Sample	Major Findings (Related to Sexual Orientation)
Alexander & Fitzpatrick (1991)	Explore nurse attitudes towards AIDS and patients with AIDS	Descriptive	United States 136 inpatient RNs	Mixed attitudinal scores ranging from majority positive (68% gay lifestyle should not be "condemned") to negative (70% uncomfortable establishing a relationship with gay man with AIDS) Significant differences between age groups ($p = 0.04$) and marital status ($p = 0.003$) on whether homosexuality should be illegal Positively leaning cognitive response to homosexuality but negatively leaning emotional response
Blackwell (2007)	Explore nurse attitudes towards LGBT patients and towards non-discrimination policy in the workplace	Descriptive, correlational	United States 165 inpatient and outpatient nurses	Of sample, 22% scored in "high grade" homophobic range Significant correlation between belief in free model of homosexuality and increased homophobia ($p < 0.05$) and between support for non-discrimination policy in workplace and decreased homophobia ($p < 0.05$)
Dinkel et al. (2007)	Explore homophobia among nursing students and faculty in a nursing baccalaureate program	Descriptive, correlational	United States 15 faculty members (student data not examined per exclusion criteria)	Low levels of homophobia among nursing faculty Positive correlation between homophobia and non-accepting religious beliefs ($p < 0.05$) Negative correlation between homophobia and accepting religious beliefs ($p < 0.05$) and LGBT acquaintance ($p < 0.05$)

Forrester & Murphy (1992)	Investigate nurse attitudes towards patients with AIDS and AIDS-related risk factors, including sexual orientation	Randomized partial hierarchical experimental	United States 360 nurses (worksite unknown)	Generally positive attitudes and willingness to interact with patients with HIV/AIDS More negative attitudes towards ($p < 0.0001$) and less willingness to interact with ($p < 0.0001$) patients with AIDS/IVDU history than patients with leukemia No greater prejudice or less willingness to interact with gay male patients than heterosexual patients ($p > 0.05$)
Glad et al. (1995)	Investigate the relationship among nurses' homophobia, fear of AIDS, and occupational risk for contracting HIV	Descriptive, coorelational	United States 24 inpatient RNs	Of sample, 33% showed moderate to extreme homophobia Opinions ranging from majority positive (79.2% homosexuals should have equal rights) to majority negative (50% homosexuality is disgusting and a sin) Positive correlation between marital status (married) and homophobia ($p = 0.037$)
Hou et al. (2006)	Examine association between attitudes towards homophobia and intention to provide care, demographics, occupational factors, sexual orientation, knowledge, and experience with LGBT people	Descriptive, coorelational	Taiwan 133 inpatient RNs	Neither positively nor negatively leaning attitudinal scores Significant correlates of positive attitude include increased education ($p < 0.001$), increased knowledge about homosexuality ($p < 0.005$), LGBT family, friend, or colleague ($p < 0.009$) Intention to care for lesbian and gay patients correlated with positive attitude ($p = 0.005$)

Jemmott et al. (1992)	Examine relationship of perceived occupational risk of AIDS and attitudes towards AIDS risk groups to behavioural intentions regarding care	Descriptive, correlational	United States 496 inpatient and outpatient nurses	Positively leaning attitudinal scores Correlates of negative attitudes include increased perception of HIV risk ($p < 0.0001$) and increased negative attitude towards IVDU ($p < 0.0001$) Negative attitude towards lesbian and gay patients correlated with decreased intention to provide care ($p < 0.0001$)
Koch et al. (1991)	Determine the personal and professional factors that are associated with AIDS attitudes in rural nurses	Descriptive	United States 731 rural inpatient and outpatient RNs	Majority of sample have negative or very negative attitudes (83% think homosexuals not viable part of society) Correlates of negative attitudes include decreased education ($p < 0.01$), Protestant ($p < 0.01$), religion rated as very important in their lives ($p < 0.01$), less knowledge about HIV/AIDS ($p < 0.01$), no experience of HIV/AIDS ($p < 0.01$), unwilling to care for patients with HIV/IADS ($p < 0.01$)
Meisen-helder (1994)	Examine contributing factors to fear of HIV contagion, including homophobia	Descriptive, correlational	United States 114 inpatient and outpatient nurses	Positively leaning attitudinal scores Homophobia correlated with fear of AIDS contagion ($p < 0.000$)

O'Sullivan et al. (2000)	Examine relationship between rural critical-care nurses' attitudes towards AIDS/people with AIDS and willingness to care for AIDS patients	Descriptive, correlational	United States 61 rural inpatient and outpatient RNs	Positively leaning attitudinal scores Equivocal correlation between homophobia and intent to provide care to gay men with AIDS
Röndahl et al. (2004)	Explore attitudes among nurses and nursing students towards LGBT patients and whether these attitudes affect their willingness to care for homosexual patients	Mixed-method	Sweden 57 nurses in outpatient ID clinic	Negatively leaning attitudinal scores Of sample, 36% would refuse to care for gay men if given the option Increased homophobia among some immigrant groups
Siminoff et al. (1998)	Explore whether nurses avoid AIDS patients more frequently than non-HIV-infected patients and what attitudes are associated with avoidance behaviours	Mixed-method	United States 100 nurses in patient-nurse dyads, inpatient	Positively leaning attitudinal scores Increased homophobia correlated with increased avoidance behaviours (avoiding eye contact) but not with other behaviours (time spent with patient, non-verbal body language) Homophobia not correlated with decreased quality of care

Smith (1993)	Describe attitudes of psychiatric nurses towards gay and lesbian patients and assess demographic correlates of these attitudes	Descriptive, comparative	United States 67 inpatient and outpatient psychiatric nurses	Negative emotional reaction to homosexuality but positive cognitive reaction
Strasser & Damrosch (1992)	Assess graduate nursing students' attitudes towards gay and hemophiliac men with AIDS	Descriptive, comparative	United States 188 RNs in a master's program	"Weak anti-gay bias" Negative emotional reaction to homosexuality but positive cognitive reaction
Suominen et al. (2010)	Describe nurses' knowledge about HIV/AIDS and its relationship to their attitudes towards people with HIV/AIDS	Descriptive, correlational	Estonia, Lithuania, Finland 833 inpatient RNs	Range of attitudinal scores among countries but positively leaning overall Correlates of decreased homophobia include being single ($p = 0.003$), childless ($p < 0.001$), working in OB/GYN ($p < 0.001$), having a friend or family member with HIV ($p < 0.001$), increased education ($p < 0.001$), willingness to provide care to persons with AIDS ($p < 0.001$), decreased work experience ($p < 0.001$)

Vermette & Godin (1996)	Identify factors influencing nurses' intention to provide home care to gay male patients or patients with AIDS	Randomized partial hierarchical experimental	Canada 102 home care nurses	Positively leaning (low-grade non-homophobic) Homophobia significantly correlated with intent to care ($p < 0.001$), perceived social norms ($p < 0.05$), general attitudes ($p < 0.01$), personal behaviour control ($p = 0.01$)
Yen et al. (2007)	Explore nurse attitudes towards gay men and lesbians and the association between attitudes and intent to provide care	Descriptive, correlational	Taiwan 1,540 inpatient and outpatient RNs	Neither positively nor negatively leaning Correlates of decreased homophobia include having an LGBT friend or relative ($p < 0.001$), increased education ($p < 0.001$), previously provided care to LGBT person ($p < 0.01$) Increased homophobia correlated with increased number of work years ($p < 0.001$), self-identified as "100% heterosexual" ($p < 0.01$), religious ($p < 0.05$) Homophobia negatively correlated with intent to care

ment was designed to measure the "negative affective response to homosexuality" (p. 380). Smith found that 57% of respondents scored in the low-grade homophobic range, with another 22.8% scoring in the high-grade homophobic range. Differences existed, however, when the researcher examined scores for heterosexual participants and lesbian and gay respondents ($p < 0.0001$). Blackwell (2007) found that a remarkably similar 22% of his randomly selected Florida-based sample fell into the high-grade homophobic range.

Conversely, Jemmott, Freleicher, and Jemmott (1992) found a positively leaning mean in their study on nurse attitudes towards homosexual patients in the context of HIV/AIDS, using the Heterosexual Attitudes Toward Homosexuality Scale (Larsen, 1988). Similar results were found in studies by Siminoff, Erlen, and Sereika (1998) and Meisenhelder (1994), both of which used Bouton's Index of Homophobia Scale (1987). This seven-item, five-point Likert-type instrument was designed to measure cultural bias against (primarily male) homosexuality, and reported good internal reliability in every study that employed it (Cronbach's alpha > 0.80). Glad, Tan, and Erlen (1995) used the same instrument and found that 33% of their convenience sample of 100 RNs in a large, urban hospital in the US Midwest had scores that suggested some homophobia among study participants (descriptive frequencies not given). It is important to note that there is significant concern about the generalizability of Glad et al.'s sample, as less than 8% held a baccalaureate degree or higher and all but one of the participants were white. Further concern about this sample is raised by the low response rate (24%). High refusal rates are associated with response bias and non-generalizability of the study findings to a broader population (Burns & Grove, 2009).

Further evidence of the existence of negative attitudes towards sexual minority patients is found in Vermette and Godin (1996). This study used a randomized, partial hierarchical design to assess attitudes, including homophobia, using Ricketts and Hudson's (1980) Index of Attitudes Toward Homosexuals, among nurses providing home care in Quebec City, Canada. Of the 102 participants, 23.5% showed some evidence of homophobia. Although the mean scores on the instrument fell into the low-grade non-homophobic category, high scores on the Balanced Inventory of Desirable Reporting suggested that a significant number of participants may have under-represented bias in ways that they felt would be favourable to the researchers.

In contrast, Strasser and Damrosch (1992) and Dinkel, Patzel, McGuire, Rolfs, and Purcell (2007) found little evidence of anti-gay bias in their respective samples of licensed RNs enrolled in a graduate nursing program ($n = 188$) and faculty of an undergraduate nursing school ($n = 15$). As these were the only two studies conducted in an academic envi-

ronment, one needs to question whether their positive findings reflect the more tolerant atmosphere of academia or the social desirability of responding positively when participating in a research project at one's school or place of employment.

In summary, every study in this integrative review found some evidence of negative attitudes towards homosexuality. The majority of studies (8 out of 17) were positively leaning. Two studies had means at the mean between positive and negative attitudes. Four studies had scores showing a division between cognitive (positively leaning) and emotional responses (negatively leaning) to homosexuality. Three studies had negatively leaning means.

Complexities of attitudes. Some studies in this review provided overall means and frequencies of instrument scores as a measure of overall attitudes towards LGBT persons, whereas other studies used more complex measures to try and capture the complexities of attitudes. This reflects the findings of the concept analysis literature on homophobia, which has been critical of commonly used definitions of homophobia for not reflecting the multidimensionality of the construct (Christensen, 2005; Richmond & McKenna, 1998).

Three studies in this review reported results on both emotional and cognitive reactions to homosexuality (Alexander & Fitzpatrick, 1991; Glad et al., 1995; Smith, 1993). In their early study, "Variables Influencing Nurses' Attitudes Toward AIDS and AIDS Patients," Alexander and Fitzpatrick (1991) found that 96% of their convenience sample of RNs felt that "AIDS was not a punishment for sins" and 84% were "sympathetic to gay AIDS patients" (p. 318). However, 70% stated they were "uncomfortable establishing a therapeutic relationship with a homosexual AIDS patient" (p. 318). Although this could be reflective of fear of HIV contagion — a common finding in early studies — it could also be reflective of a discrepancy between cognitive acceptance of and negative emotional response to homosexuality. Similar results were found by Glad et al. (1995). In their sample, 79.2% of participants believed that homosexuals should have equal rights, yet 50% felt that "homosexuality is a sin" and "disgusting."

Smith (1993) conducted a formal exploration of this possible contradiction by using two measures in his study with 250 psychiatric RNs: the Attitudes Towards Lesbians and Gays Scale (Smith, 1993) to measure cognitive attitudes towards homosexuals, and the Index of Attitudes Toward Homosexuals (Ricketts & Hudson, 1980) to measure emotional reactions. His findings were similar to those of Glad et al. (1995) and Alexander and Fitzpatrick (1991). The Attitudes Towards Lesbians and Gays Scale showed mixed-range but positively leaning scores for cogni-

tive acceptance of homosexuality. However, 77% of the scores on the Index of Attitudes Toward Homosexuals fell into the homophobic range.

Other researchers used more complex measures to capture the multidimensionality of the concept. For example, two studies (Hou et al., 2006; Yen et al., 2007) used the Attitudes Toward Homosexuality Questionnaire (Beere, 1990) in their studies of nurse attitudes towards sexual minority patients in Taiwan. This instrument conceptualizes attitudes as having four dimensions: condemnation/tolerance, morality, contact, and stereotypes. Interestingly, in both studies, scores on all four dimensions were closely correlated ($p < 0.001$). In contrast, Röndahl, Innala, and Carlsson (2004), in their study with nurses, assistant nurses, and student nurses at an infectious disease clinic in Sweden, measured three concepts: homophobic anger, homophobic guilt, and delight. These researchers found differences between groups ($p < .01$) as well as within groups (p value not reported). Among the nursing staff, 36% stated that they wished to refrain from nursing homosexual patients. Lastly, Vermette and Godin (1996) used the variables of Ajzen's (1985) Theory of Planned Behavior and Triandis's (1975) Theory of Personal Normative Belief to guide their research.

Correlates of Nurse Attitudes Towards LGBT Patients

Of the 17 studies included in this integrative review, 13 looked at correlates of nurse attitudes towards LGBT patients in an effort to describe or predict the variables that influence those attitudes. The most commonly examined variables were age, marital status, degree of religiosity, education level, personal or professional contact with LGBT persons, and fear of AIDS. Great variability was seen across studies, with five important exceptions. Firstly, personal or professional contact with LGBT persons correlated with positive attitudes towards sexual minorities in the six studies that explored this relationship (Dinkel et al., 2007; Hou et al., 2006; Koch et al., 1991; Smith, 1993; Suominen et al., 2010; Yen et al., 2007). All reported p values below the standard significance level of 0.05. Secondly, increased levels of education were correlated with a significant increase in attitudinal scores towards sexual minorities in five out of the six studies that examined this association. One study (Forrester & Murphy, 1992) found a non-significant correlation between level of education and attitudes but reported no p value. This was one of only two randomized, partial hierarchical experimental studies in the analysis. Although this is a strong research design, and the study's moderate-to-large sample size ($n = 360$) showed no evidence of sampling or response bias, the researchers failed to report information on response rate, thereby limiting the ability to draw conclusions regarding bias (Polit & Beck, 2009).

Five studies examined the relationship between religiosity and attitudes towards sexual minorities. Three studies found an increase in negative attitudes towards LGBT persons among participants who self-identified as very religious (Dinkel et al., 2007; Koch et al., 1991; Yen et al., 2007). In contrast, Smith (1993) differentiated between religious faiths and found a significant difference in attitudes between those identifying as Catholic or Protestant and those identifying as Jewish or not religious. Increased religiosity among Catholics and Protestants correlated with increased negativity towards LGBT patients ($p < .01$). Hou et al. (2006) was the only study to find a non-significant correlation between religion and attitudes (p value not reported). It is important to note that the sample for this study differed from the other samples in three ways: It consisted only of nurses working in mental health, it consisted of nurses practising in Taiwan, and the participants were more educated (48% master's or doctorate) than those who made up the other samples.

Three studies examined the relationship between fear of AIDS and attitudes towards homosexuals. One study (Glad et al., 1995) reported a non-significant correlation ($p > 0.05$), while two (Jemmott et al., 1992; Meisenhelder, 1994) reported a significant, positive correlation between fear of AIDS and negative attitudes towards homosexuals. Lastly, two studies (Hou et al., 2006; Koch et al., 1991) found a positive correlation between increased knowledge of AIDS or increased training and positive attitudes. Marital status, age, parental status, and work site had inconsistent findings.

In summary, the literature suggests that the best predictors of positive nurse attitudes towards sexual minority patients are increased education, increased personal or professional contact with LGBT persons, decreased religiosity or belonging to a more "accepting" denomination, and decreased fear of HIV contagion. These findings have important implications for educational interventions to improve attitudes among nurses.

Sequelae of Nurse Attitudes Towards LGBT Patients

Of the 17 studies, 10 attempted to assess if, and how, attitudes affect behaviour. Nine studies conceptualized and measured this relationship as reduced willingness or intent to provide care or to interact with patients (Forrester & Murphy, 1992; Hou et al., 2006; Jemmott et al., 1992; O'Sullivan, Preston, & Forti, 2000; Röndahl et al., 2004; Siminoff et al., 1998; Suominen et al., 2010; Vermette & Godin, 1996; Yen et al., 2007). Eight of those nine studies found a positive correlation between negative attitudes and reduced willingness to care for LGBT patients (p value ranging from < 0.01 to < 0.001). Only one study, Forrester and Murphy (1992), did not find a significant difference in willingness to interact with heterosexual versus homosexual patients ($p > 0.05$). The researchers

hypothesized that this finding represented a temporal change in nurse attitudes. However, a review of more recent literature in the analysis failed to support this hypothesis.

One other study obtained contradictory results. In their study with 136 nurses working in a Midwestern US hospital, Alexander and Fitzpatrick (1991) asked the nurses if they would "not be comfortable establishing a therapeutic relationship with a homosexual patient" (p. 318); 70% of the nurses agreed. The researchers compared this result to the 78% who believed that it was "not distasteful to care for homosexual AIDS patients," concluding that this is an area that needs further examination. However, this study used a non-validated instrument with no reported reliability. As well, some of the survey questions used double negatives. Improper question construction, such as double negatives, has been shown to be confusing for responders, leading to a potential increase in inaccurate responses (Dillman, 2007).

In summary, the findings of this integrative review lend support to the hypothesis that negative provider attitudes towards sexual minority patients may negatively affect care for LGBT persons (Solarz, 1999). However, as there has been no outcomes research in this area, it is unknown if this finding in the literature can be translated to "real life" provider behaviour.

Discussion

A growing body of literature suggests that LGBT persons experience significant health disparities. The attitudes of health-care providers have been postulated to be a major contributing factor in these disparities, by restricting access to health care for LGBT persons and/or by providing them with substandard or culturally incompetent care. The literature on nurse attitudes supports this hypothesis, suggesting that many nurses harbour negative attitudes towards LGBT patients and that these attitudes may adversely affect treatment. However, care must be taken in interpreting and generalizing the findings of the existing research, as the published studies have significant methodological, conceptual, and theoretical limitations.

Limitations of the Literature

Sample size. A representative sample is an essential element in the ability to draw conclusions on the generalizability of study findings (Burns & Grove, 2009). Of the 17 studies included in this review, 11 used convenience samples of varying sizes, from 57 to 1,540. Convenience sampling is a weak form of sampling that does not allow for control of sampling error, thus increasing the risk of bias. However, because it is inexpensive

and convenient, it is an acceptable form of sampling as long as its limitations are taken into account (Burns & Grove, 2009). Only one study in the analysis reported a power analysis (Siminoff et al., 1998). This essential but often missing element in nursing research helps to determine whether the sample size is adequate to "detect differences or relationships that actually exist in the population" (Burns & Grove, 2009, p. 357), thereby preventing false negative results.

Sampling strategy. When conducting a study, researchers choose from among a variety of sampling strategies and recruit participants from a variety of settings. Six studies in this review used convenience sampling from one site, such as a hospital, clinic, or school of nursing. Use of a convenience sample from one site often leads to bias (Burns & Grove, 2009). Three studies in this review used convenience samples from multiple sites (Hou et al., 2006; Siminoff et al., 1998; Yen et al., 2007). Three studies used population sampling, potentially increasing the heterogeneity of the sample and reducing sampling bias (Burns & Grove, 2009; Jemmott et al., 1992; Koch et al., 1991; Vermette & Godin, 1996). Lastly, five studies chose random sampling (simple or stratified) as their strategy (Blackwell, 2007; Forrester & Murphy, 1992; Meisendhelder, 1994; O'Sullivan et al., 2000; Smith, 1993). This method reduces the risk of systematic bias even further, by ensuring that everyone in the sampling frame has an equal chance of being selected for the study (Burns & Grove, 2009).

Sociodemographic variables. An examination of the basic sociodemographic variables of a sample is an essential element in analyzing a study's external validity (Burns & Grove, 2009). In this review, four studies did not report basic sample demographics (Alexander & Fitzpatrick, 1991; Blackwell, 2007; Röndahl et al., 2004; Vermette & Godin, 1996). Another five studies left out descriptive frequencies of participants' ethnicity (Dinkel et al., 2007; Forrester & Murphy, 1992; Meisenhelder, 1994; O'Sullivan et al., 2000; Strasser & Damrosch, 1992).

Given the sociodemographic data provided, multiple studies showed evidence of sampling/response bias. Three studies used samples in which the majority had only a diploma or an "associate degree" (Glad et al., 1995; Meisenhelder, 1994; O'Sullivan et al., 2000). In contrast, two studies used samples in which the majority of nurses had graduate training (Hou et al., 2006; Smith, 1993). As educational achievement has been the variable most closely associated with positive attitudes towards LGBT patients, one would expect to find disparities in the results of these two groups of studies. However, not all of the studies explored the correlation between education level and attitudes.

Instrumentation issues. This review found a lack of consistency among instruments used to explore attitudes towards LGBT patients. In

the 17 studies in the review, 14 different instruments were used to examine attitudes and beliefs. Lack of measurement consistency leads to difficulties with cross-study comparison and generalizability (Burns & Grove, 2009), as well as difficulty interpreting and comparing scores of the measures; not all studies in the sample adequately discussed measurement and interpretation issues with the chosen instrument. As well, the majority of the studies lacked explicit and complete reliability and validity information, precluding the drawing of conclusions about the accuracy of the data (Polit & Beck, 2007). Due to both the research goals and questions and the instruments chosen, different studies measured different constructs, or different aspects of the same construct.

This review also found that social desirability measures were used in only two of the studies (Röndahl et al., 2004; Vermette & Godin, 1996). Measuring socially desirable responses in an essential element in assessing study validity, especially when the topic is personally or culturally sensitive, and may be done using a social desirability scale or via structuring of questions and surveys (Nederholf, 2006). Röndahl et al.'s (2004) mixed-method study included a short measure of social desirability imbedded into the small qualitative portion of the study; three out of the seven nursing staff who wrote a comment showed evidence of socially desirable reporting. Similarly, Vermette and Godin (1996) found evidence of social desirability in their study of the impact of homosexuality and AIDS on home care nurses. These findings support the need for systematic use of a method for gauging social desirability bias when discussing attitudes towards sexual orientation.

Theoretical framework and conceptual definitions. The use of a theoretical framework in health research is an important way to standardize and guide the development and testing of related concepts and/or variables in an identified area of research (Burns & Grove, 2009). This review found a dearth of studies looking at attitudes towards LGBT that reflected the complexity of the concept. The majority of studies measured "homophobia" (often undefined) or attitudes towards homosexuality as an add-on to an investigation primarily interested in attitudes towards persons with HIV/AIDS. This is limiting both conceptually and methodologically. First of all, it is difficult to separate the concepts of fear of contagion of HIV and attitude towards homosexuality when they are measured in tandem. Second, studies looking at attitudes towards homosexuality as part of a study of attitudes towards HIV/AIDS omit measurement and discussion of attitudes towards lesbians, bisexuals, and transgender persons. No studies in this review discussed bisexual or transgender persons, and studies mentioned lesbians only when the instrument used had a separate subscale for attitudes towards gay women (Blackwell, 2007; Smith, 1993). Lastly, including attitudes towards homo-

sexuality as a small part of a study precludes in-depth examination of the concept, as well as development and testing of conceptual models that explore evidence-based concepts of attitudes (Azjen, 1985) and homophobia (Christensen, 2005; Richmond & McKenna, 1998).

Of the 17 studies in this integrative review, five used a theoretical framework to guide their research (Glad et al., 1995; Hou et al., 2006; Meisenhelder, 1994; Smith, 1993; Vermette & Godin, 1996). However, they all used different frameworks, leading to selection of different variables of interest and non-comparable conclusions. Seven studies defined important concepts to a greater or lesser degree (Blackwell, 2007; Dinkel et al., 2007; Glad et al, 1995; Meisenhelder, 1994; Röndahl et al., 2004; Smith, 1993; Vermette & Godin, 1996).

In its 2011 landmark report on LGBT health disparities, the Institute of Medicine identifies four theoretical frameworks for LGBT health and research: (1) the minority stress model posits that the experience of stigma and discrimination in a society that devalues non-heterosexuals and those living outside of the traditional, biologically based gender binary leads to stress and poor health outcomes, especially those related to mental health; (2) intersectionality theory examines the experience of non-heterosexual sexual orientation in the context of its interaction with an individual's race/ethnicity, class, and sex, and examines the cumulative effect of marginalization on health; (3) the life course perspective understands sexual orientation/gender identity in terms of human development, highlighting the varying needs and experiences of LGBT persons across the lifespan; and (4) social ecology examines the multiple influences of individual experience, family and relationships, and community and society, and their complex interplay on behaviour, attitude, and experience (IOM, 2011).

Social, cultural, and historic context. One must be cognizant of the institutional, social, cultural, and historical contexts in which research is done. A strength of the existing literature is variation in the current practice setting of the RN samples. The research contains samples of RNs currently working in a variety of inpatient units (Alexander & Fitzpatrick, 1991; Glad et al., 1995; Hou et al., 2006; Siminoff et al., 1998; Suominen et al., 2010; Yen et al., 2007) and in outpatient/community practices (Röndahl et al., 2004; Vermette & Godin, 1996), recruited via educational activities and state boards of nursing without regard to practice site (Blackwell, 2007; Dinkel et al., 2007; Forrester & Murphy, 1992; Jemmott et al., 1992; Koch et al., 1991; Meisenhelder, 1994; O'Sullivan et al., 2000; Smith, 1993; Strasser & Damrosch, 1992).

Likewise, there is some geographic variation in the literature. The majority of studies were conducted in the United States (Alexander & Fitzpatrick, 1991; Blackwell, 2007; Dinkel et al., 2007; Forrester &

Murphy, 1992; Glad et al., 1995; Jemmott et al., 1992; Koch et al., 1991; Meisenhelder, 1994; O'Sullivan et al., 2000; Siminoff et al., 1998; Smith, 1993; Strasser & Damrosch, 1992). One study was conducted in Canada (Vermette & Godin, 1996); two used samples in Taiwan (Hou et al., 2006; Yen et al., 2007); one was conducted in Sweden (Röndahl et al., 2004); and one compared samples of nurses in Estonia, Lithuania, and Finland (Suominen et al., 2010). The attitudes of nurses towards LGBT patients remain unexamined in much of Europe; in most of Asia; and in Africa, Latin America, and the Middle East. Polls have consistently shown that societal attitudes towards homosexuality vary greatly by region (Pew Research Center for People and the Press, 2011); thus there is a wide gap in the literature regarding nurse attitudes towards LGBT patients in many areas of the world.

Lastly, it is essential to recognize the historical context in which research is done. Polls suggest that there has been a significant change in attitudes towards LGBT persons over the past decade, especially in the Americas, New Zealand, Australia, parts of the Middle East, and parts of Europe (Pew Research Center, 2011). Specifically, polls show greater acceptance of homosexuality after the passage of same-sex marriage laws (Naurath, 2007). In addition, public opinion polls suggest that younger people are more tolerant of LGBT persons than older people (Pew Research Center, 2011) and that the stigma of HIV/AIDS has decreased with improved treatment, although results indicate that many people still harbour concerns about contact with HIV-infected persons (Herek, 2010). As the majority of the research on nurses' attitudes towards LGBT patients was conducted in the 1990s, it is possible that their attitudes have changed significantly. Thus there is an urgent need to replicate studies in the current social and political climate.

Gaps in knowledge. Much of the literature is dated and is the result of research conducted as part of studies on attitudes towards persons with HIV/AIDS. Although the findings of these studies laid the foundation for further research in this area, caution is advised when interpreting the results, as they can quickly become out of date in the fast-evolving world of HIV/AIDS. As well, studies intertwined with studies on attitudes towards patients with HIV/AIDS generally have measured only attitudes towards gay men. The LGBT population consists of at least four distinct populations, each with its own health needs and differing levels of stigma and marginalization (IOM, 2011; Solarz, 1999). More research is needed on attitudes towards subpopulations of sexual and gender minority persons, especially transgender persons, who are often considered among the most marginalized of all US populations (Dean et al., 2000).

We need more quantitative research that uses national samples of providers; looks at correlates of negative attitudes; examines the relation-

ship between attitudes towards LGBT patients, nursing care, and patient outcomes; and examines attitudes of advanced practice nurses (nurse practitioners), who provide a significant amount of primary health care to diverse populations, including people of all ethnic backgrounds, ages, genders, and sexual orientations.

As well, there is a wide gap in the literature regarding qualitative research. Qualitative research is an essential method in developing an understanding of a new area of inquiry, when the goals of the study are to explore the complexities and nuances of a phenomenon, or to gain an understanding of the emic perspective of a phenomenon (Cresswell, 2007). We need studies that discern and explore the subtleties of nurse attitudes towards sexual minority patients, differentiating between the cognitive and emotional aspects of the phenomenon and between homophobia and the related phenomenon of heterosexism.

Conclusion

The purpose of this analysis was to critically appraise and synthesize the literature on nurse attitudes towards LGBT patients. The review found that there is a paucity of literature on this important topic. A synthesis of the literature found that the majority of studies are more than a decade old, use small, convenience, samples, and often show evidence of sampling or response bias, thus limiting the generalizability of the findings to larger populations. As well, the literature is limited by inconsistent definitions of key constructs (including homophobia, homosexual, and LGBT); lack of theoretical frameworks; inconsistent use of instruments and use of instruments with poor or unknown validity and reliability; inconsistent examination of possible predicting or consequential variables; and exclusion of measures of bisexual and transgender persons and, often, lesbians.

The implications of a more robust body of literature in this area are numerous. Increased knowledge in this area could lead to interventions to increase nurses' cultural competency regarding sexual minorities. As well, increased discussion of health disparities among LGBT persons, including discussion of provider factors, could lead to increased resource allocation to research, education, and direct services. Lastly, discussion of these findings could encourage nursing faculty to include more LGBT content in their curricula, thereby improving knowledge and attitudes towards LGBT persons among the nurses of tomorrow.

References

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50,* 179–211.

Alexander, R., & Fitzpatrick, J. (1991). Variables influencing nurses' attitudes toward AIDS and AIDS patients. *AIDS Patient Care,* December, 315–320.

Beere, C. A. (1990). *Sex and gender issues: A handbook of tests and measures.* New York: Greenwood.

Blackwell, C. (2007). Belief in the "free choice" model of homosexuality: A correlate of homophobia in registered nurses. *Journal of LGBT Health Research, 3*(3), 31–40.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design.* Cambridge, MA: Harvard University Press.

Burns, N., & Grove, S. (2009). *The practice of nursing research: Appraisal, synthesis and generation of evidence* (6th ed.). St. Louis: Elsevier.

Christensen, M. (2005). Homophobia in nursing: A concept analysis. *Nursing Forum, 40*(2), 50–71.

Cochran, S. D., Mays, V. M., Bowen, D., Gage, S., Bybee, D., Roberts, S. J., et al. (2001). Cancer related risk indictors and preventive screening behaviors among lesbian and bisexual women. *American Journal of Public Health, 91*(4), 591–597.

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.

Dean, L., Meyer, I. H., Robinson, K., Sell, R. L., Sember, R., Silenzio, V. M. B., et al. (2000). Lesbian, gay, bisexual and transgender health: Findings and concerns. *Journal of the Gay and Lesbian Medical Association, 4*(3), 102–151.

Diamont, A. L., Wold, C., Spritzer, K., & Gelberg, L. (2000). Health behaviors, health status, and access to and use of health care: A population based study of lesbians, bisexual and heterosexual women. *Archives of Family Medicine, 9,* 1043–1051.

Dilley, J. A., Simmons, K. W., Boysun, M. J., Pizacani, B. A., & Stark, M. J. (2009). Demonstrating the importance and feasibility of including sexual orientation in public health surveys: Health disparities in the Pacific Northwest. *American Journal of Pubic Health, 99*(10), 1–10.

Dillman, D. A. (2007). *Mail and Internet surveys: The Tailored Design Method* (2nd ed.). Hoboken, NJ: John Wiley.

Dinkel, S., Patzel, B., McGuire, M. J., Rolfs, E., & Purcell, K. (2007). Measures of homophobia among nursing students and family: A Midwestern perspective. *International Journal of Nursing Scholarship, 4(*1), 1–12.

Douglas, C. J., Kalman, C. M., & Kalman, T. P. (1985). Homophobia among physicians and nurses: An empirical study. *Hospital and Community Psychiatry, 36*(12), 1309–1311.

Forrester, D. A., & Murphy, P. A. (1992). Nurses' attitudes toward patients with AIDS and AIDS-related risk factors. *Journal of Advanced Nursing, 17,* 1260–1266.

Ganong, L. H. (1987). Integrative review of nursing research. *Research in Nursing and Health, 10,* 1–11.

Gay and Lesbian Medical Association. (2001). *Healthy people 2010: Companion document for lesbian, gay, bisexual, and transgender (LGBT) health.* San Francisco: Author.

Gee, R. (2006). Primary care health issues among men who have sex with men. *Journal of the American Academy of Nurse Practitioners, 18,* 144–153.

Giddings, L. S., & Smith, M. C. (2001). Stories of lesbian in/visibility in nursing. *Nursing Outlook, 49*(1), 14–19.

Glad, J., Tan, W., & Erlen, J. A. (1995). Fear of AIDS, homophobia, and occupational risk for HIV: A staff development challenge. *Journal of Nursing Staff Development, 11*(6), 313–319.

Heck, J. E., Sell, R. L., & Gorin, S. S. (2006). Health care access among individuals involved in same-sex relationships. *American Journal of Public health, 96*(6), 1111–1118.

Herek, G. M. (2010). *Nationwide poll suggests that AIDS continues to be a stigmatized disease.* [Press release.] Retrieved March 23, 2012, from http://psychology.ucdavis.edu/rainbow/html/genpress.pdf.

Hou, S., Pan, S., Liu, H., Wu, S., Yang, W., Yang, H., et al. (2006). Correlates of attitudes toward homosexuality and intention to care for homosexual people among psychiatric nurses in Southern Taiwan. *Kaohsiung Journal Medical Science, 22*(8), 390–396.

Hutchinson, M. K., Thompson, A., & Cederbaum, J. (2006). Multi-system factors contributing to disparities in preventive health care among lesbian women. *Journal of Obstetric, Gynecological and Neonatal Nursing, 35,* 393–402.

Institute of Medicine. (2011). *The health of lesbian, gay, bisexual and transgender people: Building a foundation for better understanding.* Washington: National Academies Press.

International Congress of Nurses. (2006). *The ICN code of ethics for nurses.* Retrieved March 23, 2012, from http://www.icn.ch/about-icn/code-of-ethics-for-nurses/.

Jemmott, J. B., Freleicher, J., & Jemmott, L. S. (1992). Perceived risk of infection and attitudes toward risk groups: Determinants of nurses' behavioral intentions regarding AIDS patients. *Research in Nursing and Health, 15*(4), 295–301.

Koch, P., Preston, D., Young, E., & Wang, M. (1991). Factors associated with AIDS-related attitudes among rural nurses. *Health Values: The Journal of Health Behavior, Education and Promotion, 15*(6), 32–40.

Larsen, K. S. (1980). Heterosexual Attitudes Toward Homosexuality Scale. In C. M. Davis, W. L. Yarber, R. Bauserman, G. Schreer, & S. L. Davis (Eds.), *Handbook of sexuality related measures* (pp. 394–395). Thousand Oaks, CA: Sage.

Mayer, K. H., Bradford, J. B., Makadon, H. J., Goldhammer, H., & Landers, S. (2008). Sexual and gender minority health: What we know and what needs to be done. *American Journal of Public Health, 98(*6), 989–995.

Meisenhelder, J. B. (1994). Contributing factors to fear of HIV contagion in registered nurses. *Image: Journal of Nursing Scholarship, 26*(1), 65–69.

Milton Keynes Primary Care Trust. (2004). *Critical Skills Appraisal Programme.* Retrieved February 3, 2011, from http://www.phru.nhs.uk/pages/phd/resources.htm.

Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G., & the PRISMA Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine, 6*(7), e1000097.

Naurath, N. (2007). Perceived acceptance of homosexuals differs around globe: Acceptance most likely in Americas, least likely in Africa. *Gallup World,* November 1. Retrieved July 8, 2012, from http://www.gallup.com/poll/102478/perceived-acceptance-homosexuals-differs-around-globe.aspx/.

Nederholf, A. J. (2006). Methods of coping with social desirability bias: A review. *European Journal of Social Psychology, 15*(3), 263–280.

O'Sullivan, S., Preston, D. B., & Forti, E. M. (2000). Predictors of rural critical care nurses' willingness to care for people with AIDS. *Intensive and Critical Care Nursing, 16,* 181–190.

Pew Research Center for People and the Press. (2011). Most say homosexuality should beaccepted by society. *Pew Research Center Publications,* May 13. Retrieved July 8, 2012, from http://pewresearch.org/pubs/1994/poll-support-for-acceptance-of-homosexuality-gay-parenting-marriage.

Polit, D. K., & Beck, C. T. (2009). *Essentials of nursing research: Appraising evidence for nursing practice* (7th ed.). New York: Lippincott, Williams & Wilkins.

Richmond, J. P., & McKenna, H. (1998). Homophobia: An evolutionary analysis of the concept as it applies to nursing. *Journal of Advanced Nursing, 28*(2), 362–369.

Ricketts, W. A., & Hudson, W. W. (1980). Index of homophobia. In C. M. Davis, W. L. Yarber, R. Bauserman, G. Schreer, & S. L. Davis (Eds.), *Handbook of sexuality related measures* (pp. 367–369). Thousand Oaks, CA: Sage.

Röndahl, G., Innala, S., & Carlsson, M. (2004). Nursing staff and nursing students' emotions towards homosexual patients and their wish to refrain from nursing, if the option existed. *Scandinavian Journal of Caring Sciences, 18*(1), 19–26.

Siminoff, L. A., Erlen, J. A., & Sereika, S. (1998). Do nurses avoid AIDS patients? Avoidance behaviours and the quality of care of hospitalized AIDS patients. *AIDS Care, 10*(2), 147–163.

Smith, G. B. (1993). Homophobia and attitudes toward gay men and lesbians by psychiatric nurses. *Archives of Psychiatric Nursing,* 7(6), 377–384.

Solarz, A. L., Ed. (1999). *Lesbian health: Current assessment and directions for the future.* Washington: National Academies Press.

Stevens, P. E. (1993). Lesbian health care research: A review of the literature from 1970 to 1990. In P. N. Stern (Ed.), *Lesbian health: What are the issues?* (pp. 1–30). Philadelphia: Taylor & Francis.

Strasser, J. A., & Damrosch, S. (1992). Graduate nursing students' attitudes toward gay and hemophiliac men with AIDS. *Evaluation and the Health Professions, 15*(1), 115–127.

Suominen, T., Koponen, N., Mockiene, V., Raid, U., Istomina, N., Vanska, M., et al. (2010). Nurses' knowledge and attitudes to HIV/ADIS: An international comparison between Finland, Estonia and Lithuania. *International Journal of Nursing Practice, 16,* 138–147.

Triandis, H. C. (1979). Values, attitudes and interpersonal behavior. *Nebraska Symposium on Motivation, 27,* 195–257.

Tully, C. T. (1995). In sickness and in health: Forty years of research on lesbians. In C. T. Tully (Ed.), *Lesbian social services: Research issues* (pp. 1–18*)*. New York: Harrington Park Press/Haworth Press.

Vermette, L., & Godin, G. (1996). Nurses' intentions to provide home care: The impact of AIDS and homosexuality. *AIDS Care, 8*(4), 479–488.

Whittemore, R., & Knafl, K. (2005). The integrative review: Updated methodology. *Journal of Advanced Nursing, 52*(5), 546–553.

Yen, C., Pan, S., Hou, S., Liu, H., Wu, S., Yang, W., et al. (2007). Attitudes toward gay men and lesbians and related factors in Southern Taiwan. *Public Health, 121,* 73–79.

Acknowledgements

The author wishes to express her heartfelt appreciation to the nurse scientists cited in the article for their formative work in this field and to the following colleagues for their assistance in the preparation of the manuscript: Drs. Nancy VanDevanter, M. Katherine Hutchinson, Michele Shedlin, Gail D'Eramo Melkus, Noelle Leonard, Randall Sell, and the late Lena Sorensen.

Caroline Dorsen, MSN, FNP-BC, is Clinical Instructor and Program Coordinator of the Family Nurse Practitioner Program, College of Nursing, New York University, New York, New York, United States.