JCN Journal of Clinical Nursing

Journal of Clinical Nursing

WOMEN'S PERSPECTIVES AND EXPERIENCES

Lesbians' attitudes and beliefs regarding overweight and weight reduction

Susan J Roberts, Eileen M Stuart-Shor and Rachel A Oppenheimer

Aim and objective. This article presents data on attitudes and beliefs about overweight/weight reduction in lesbians. The project was developed to have information on which to base future culturally sensitive interventions to reduce cardiovascular risk in lesbians.

Background. Lesbians have been found to have high rates of obesity/overweight and to be more accepting of it. Researchers have hypothesised that this is attributed to different attitudes towards body weight and shape in lesbians than heterosexuals. Little is known about acceptable ways to intervene to decrease cardiovascular risk in lesbians in view of these attitudes.

Design. Women over 21 who self-identified as lesbian and reported one or more cardiovascular risk factors were recruited from medical providers and community resources. Twenty-five women participated in five focus groups that explored practices, attitudes and beliefs about cardiovascular risk and culturally acceptable strategies to reduce cardiovascular risk in lesbians.

Method. Demographic and risk factor information was collected from focus group members by questionnaire. Focus groups were audiotaped and transcribed. Investigators reviewed the transcripts and identified, coded and categorised data to begin to identify emergent themes.

Results. Lesbian participants with risk factors for cardiovascular risk expressed concern about the health consequences of weight but want a focus on their general health rather than exclusively on the BMI. There is not homogeneity in attitudes and beliefs about weight and overweight among lesbians, and generational differences were found. Minority stress, anxiety and depression and homophobia were major factors in health behaviours and barriers to changing unhealthy behaviours.

Relevance to clinical practice. Lesbian participants with risk factors for cardiovascular disease were eager to be involved in individual and group culturally sensitive programs that focus on improved health and well being. Recommended interventions include lesbian specific multidimensional group interventions that could deal with the multiple factors involved in causing and maintaining the behaviours.

Key words: cardiovascular disease, lesbian, nurses, nursing, obesity, weight reduction

Accepted for publication: 6 October 2009

Background

Research over the last decade has shown that obesity is a major health problem (James 2008) and is related to cardiovascular disease (CVD) (Eckel *et al.* 2004, Klein *et al.* 2004, Poirier *et al.* 2006) cancer and a variety of other health problems in women (Mosca *et al.* 2007, Ryan 2007). Reduction in cardiovascular risk factors (obesity, hypertension, diabetes, glucose intolerance, smoking, unhealthy eating and sedentary lifestyle) has been associated with a reduction

Authors: *Susan J Roberts*, DNSc, ANP, FAAN, Northeastern University School of Nursing, Boston, MA, USA; *Eileen M Stuart-Shor*, PhD, ANP, FAHA, FAAN, University of Massachusetts Boston, College of Nursing and Health Sciences, Beth Israel Deaconess Medical Center, Boston, MA, USA; *Rachel A Oppenheimer*, MS, JRI Health-Sidney Borum Jr. Community Health Center, Boston, MA, USA

Correspondence: Dr Susan J Roberts, 211 Robinson Hall, Northeastern University School of Nursing, 360 Huntington Avenue, Boston, MA 02115, USA. Telephone: 617-373-3130.
E-mail: s.roberts@neu.edu

© 2010 Blackwell Publishing Ltd, *Journal of Clinical Nursing*, **19**, 1986–1994
doi: 10.1111/j.1365-2702.2009.03182.x

in development of CVD (Eckel *et al.* 2004, Poirier *et al.* 2006). A recent review of the obesity literature found that lesbians are more likely to be overweight or obese and to be more accepting of it (Bowen *et al.* 2008). This article presents data on attitudes and beliefs about overweight/weight reduction in lesbians. The data come from a larger project undertaken to broaden the understanding of the important elements of culturally sensitive interventions to reduce risk and prevent CVD in lesbians.

The US Institute of Medicine report on lesbian health recommended more research into the prevalence of risk factors for CVD in this population (Solarz 1999). One risk factor that has been of particular concern and interest in lesbians is overweight/obesity. Early health surveys of lesbians found that they were significantly more likely to be obese, although they were less likely to consider themselves to be overweight (Cochran *et al.* 2001). Recent surveys have found that lesbians had higher rates of being overweight compared with national statistics but were more likely to participate in vigorous exercise (Aaron *et al.* 2001) and have higher rates of heart disease (Diamant & Wold 2003). Lesbians who participated in the US Women's Health Initiative had higher rates of obesity, 51% of the lesbians were overweight or obese and the highest rates of myocardial infarction when compared to the heterosexual women (Valanis *et al.* 2000). Other studies have found that lesbian samples had higher BMIs than heterosexual women (Roberts *et al.* 1998, 2003, Case *et al.* 2004). An analysis of the data from the 2002 US National Survey of Family Growth found that lesbians had a higher prevalence of overweight and obesity than all other female sexual orientation groups (Boehmer *et al.* 2007).

Being overweight and obese in lesbians and bisexuals has been found to be associated with older age, poorer health status, lower educational attainment, relationship cohabitation and lower exercise frequency (Yancey *et al.* 2003). A recent study found a relationship between childhood sexual abuse and obesity in lesbians (Aaron & Hughes 2007). One explanation for the higher BMI has been that lesbians are less concerned about weight, because they are not as socialised as heterosexual women to adhere to traditional standards of appearance (Bowen *et al.* 2008). Lesbians have been found to have attitudes similar to heterosexual comparisons concerning weight, appearance and dieting and the same rates of bulimia in some studies (Brand *et al.* 1992, Heffernan 1996, Feldman & Meyer 2007), while others found that lesbians have less negative attitudes about their bodies (Bergeron & Senn 1998, Polimeni *et al.* 2009) and find women with higher BMIs more attractive (Swami & Tovee 2006). One study found that lesbians have internalised societal norms about weight and body image but are hesitant to discuss it with other lesbians for fear that they will be criticised if they appear to be trying to conform to societal norms (Kelly 2007).

A recent analysis of the California Life Survey found that higher rates of psychological distress, related to minority stigma and stress, account for differences in health problems among lesbians and bisexual women (Cochran & Mays 2007). Higher rates of depression and other mental health problems have consistently been found in lesbian populations (Valanis *et al.* 2000, Matthews *et al.* 2002, Case *et al.* 2004, Razzano *et al.* 2006). Researchers have hypothesised that stigma and the stress of being a minority may be related to this high rate of depression (Meyer 2003). Stress related to being gay, stigma and lack of social support have been related to psychological distress (Oetjen & Rothblum 2000, Lewis *et al.* 2003). Stress related to stigma, internalised homophobia is thought to lead to lowered self-esteem, stress and depression (McGregor *et al.* 2001). Depression is a known risk factor for CVD and may also be related to obesity and to the inability to make behavioural change.

Little data exist on interventions to reduce obesity/overweight and other CVD risk in lesbians. One lesbian focus group study found that many of the barriers to exercise interventions were similar to other women, but that the lack of lesbian-focused exercise groups and family memberships for lesbians to fitness centres were unique barriers for this population (Brittain *et al.* 2006). Sexual minority women have been found to be interested in programs related to weight loss but are more motivated by becoming healthy and fit rather than being thin and are more accepting of larger-size bodies (Bowen *et al.* 2006). Questions remain about what factors are related to successful risk reduction in lesbians, especially related to maintaining normal weight.

Research design and methods

Using qualitative methods, we conducted five focus groups that explored practices, attitudes and beliefs about CVD risk and culturally acceptable strategies to reduce CVD risk in lesbians. The focus group design was selected, because it enabled researchers to get large amounts of data quickly, with flexibility and high face validity, and because the technique is socially oriented, tapping into human tendencies and promoting self-disclosure among participants, capturing real-life data in a social environment (Reynolds & Johnson 1978, Krueger 1988). The researchers developed a demographic and health questionnaire and a semi-structured interview guide consisting of root questions and probes based on the literature and the researchers prior to experience with lesbian health issues and cardiovascular risk appraisal.

The protocol was reviewed and approved by the Northeastern University Institutional Review Board.

Recruitment and enrollment

Women over 21 who self-identified as lesbian and reported one or more CVD risk factors were recruited from medical providers and community resources in regions of Massachusetts known to have a high prevalence of lesbians. Participants were recruited using a personalistic and multisource strategy reported to be useful in minority populations, which involved placing notices about the groups in places where lesbians were thought to be found and advertising the study in periodicals specific to lesbians (Jarrett 1993, Rothblum *et al.* 2002). Participants were recruited with flyers sent to lesbian medical providers, advertisements/talks at community resources i.e. bookstores, churches, women's centres etc. The researchers screened women interested in participating by phone or in person to determine if they met eligibility criteria. Women who had cognitive or mental disorders that would make them unable to understand and/or participate in the project were excluded from the study. Once an eligible participant was identified, the study was presented. If they were interested in participation, the participant was assigned to a focus group. The groups were conducted with 3–10 lesbians in each group, consistent with sample sizes in similar studies (Plaut *et al.* 1993). Each participant completed a health and habits and demographics questionnaire at the beginning of the focus group. Prior to beginning the session, the interviewers introduced themselves, using self-disclosure to engender open communication and trust. An introduction that emphasised the purpose of the study reinforced the credibility of the project and began in the following manner: 'As a lesbian woman you have been invited to participate in this focus group about heart health. We are interested in understanding the attitudes and beliefs of lesbians around health lifestyle behaviors and risk factors for developing heart disease. We are interested in what you do to stay healthy and what makes it easy or difficult for you to stay healthy or manage disease'.

Open-ended questions were used to elicit information. Specific questions were used to uncover the participant's knowledge of cardiovascular risk, beliefs about risk of lesbians for disease, attitudes towards weight and weight reduction and suggestions for the content of a program to reduce CVD risk among lesbians. An example of open-ended question with probes is as follows: 'Some studies have suggested that lesbian women experience more depression. (probe: Would you agree with this?; What contributes to this issue?; Do you see this as increasing your/one's risk of heart disease?

Data management and analysis

Participants completed a questionnaire which included information on demographic and personal characteristics. Descriptive statistics (frequency and per cents) was used to describe the characteristics of the sample including race, education, marital status and self-reported morbidity (hypertension, diabetes, high blood pressure and family history).

The focus groups were audio taped and transcribed by a trained research assistant (RA) who attended the group to take notes, keeping a record of who spoke (by ID number) and the first five words they spoke. At the end of each focus group, the team met for a debriefing to review the process and assure that the data gathered would enable the investigators to answer the question posed by the study. Data collection continued until thematic saturation was achieved.

The investigators individually reviewed the transcripts and identified, coded and categorised data to begin to identify emergent themes. They then met as a group for a full day to compare coded and categorised data, using an inductive process to determine emergent patterns (Patton 1989, Richards 2005). This enhanced the rigour of the study, immersing the investigators in the data, reading the transcripts repetitively to identify and refine themes, examine competing and disconfirmatory explanations and assuring inter-rater reliability and congruence in themes. This design assured a commitment to transparency, diligence, verification and reflexivity. Data were reviewed until thematic saturation was achieved.

Results

Sample

Twenty-five women with self-identified risk factors for CVD participated in the five focus groups, and 24 completed a demographic and health behaviour questionnaire. The mean age of the sample was 44·5, with a range in age of 22–60. Each group included a range across the ages. Other demographics and cardiovascular risk are displayed in Table 1.

Attitudes about weight

When asked if lesbians view weight differently than other women, the beliefs and attitudes showed variability. There were several themes that emerged from the data: (1) generational differences, (2) acceptance of weight and body

Table 1 Demographics and cardiovascular risk

	n	%
Education		
Less than High School	1	4·2
Some College	6	25·0
B.S. Degree	10	4·7
Graduate School	7	29·2
Income		
Less than $20,000	5	20·8
$21,000–30,000	4	16·7
$31,000–40,000	1	4·2
$41,000–50,000	2	8·3
$51,000–60,000	2	8·3
$71,000–80,000	1	4·2
Greater than $80,000	9	37·5
Race		
White	20	83
African American	3	13
African American and Hispanic	1	4
Marital status		
Married to a woman	7	29·2
Unmarried couple	12	50·0
Divorced	1	4·2
Never married	4	16·7
Work status		
Fulltime	11	46
Part time	1	4·7
Self-employed	3	12·5
Out of work >1 year	1	4·2
Student	2	8·3
Disabled	5	20·8
Cardiovascular disease (CVD) risk factors		
Family hx of CVD	20	83
Overweight	18	75
High blood pressure	8	33
High cholesterol	5	20
Diabetes mellitus	3	13

image, and (3) effects of minority stress and depression on health behaviours.

Generational differences

The groups each contained women who were under 30 and women over 50. Each group represented a range of ages which allowed for discussion in the group that they noted as related to their age and generation. Younger women felt that lesbians did not have different attitudes about their own weight. One commented that she was 'not different than straight friends – I want to be thinner and look good' (group 1, participant 2). Another noted, 'I don't think it's any different- if you are overweight, you tax your heart' (g2, p10). Another woman noted, 'My mother, my grandmother, we all have to deal with it. I don't think they feel different than I do'(g1, p5). The older women were less likely to express a desire to be thin. One older woman explained why she thought age made a difference in her perspective:

> Age is defining, you know now that I'm in my 40s… I think that older lesbians have different perspectives around weight and body changing and understanding that that happens. I think when I look back on myself being younger and I wanted, you know, to be thin … but I knew that it was socially constructed, I got it even then. (g2, p8)

Several of the over age 40 participants expressed the belief that lesbians were more likely to reject socially constructed social norms of society related to appearance, body type and weight for women. One explained, 'I feel the norms and pressures around women's weight are very socially constructed … and I think that a lot of lesbians actively reject it' (g2, p9).

Acceptance of weight and body images

There was an agreement that lesbians are more accepting of a variety of body images. Several women acknowledged concern that this attitude may be deleterious to the health of lesbians:

> We're more apt to accept each other for who and what we are so if we gain a little weight, so what? In the male-female community it's more of a threat … maybe if we weren't so accepting, then we'd be thinner and healthier. (g1, p7)

> so the whole women's movement, yeah, you know, 'We are ok however and whatever shape we're in', you know and it was just really important and I think I still agree with it, but I think we've … it's slipped over into accepting everybody being way too overweight, you know. I noticed I'm lax about that myself. (g3, p17)

Others suggested that there is a variation in the attitudes in the lesbian community about weight, some criticising women for being overweight and others championing overweight. One woman described it:

> May be at Women's festivals or something there'd be, like fat lesbians who want their own group and then there'd be the other group was telling them that, you know, you're bad and that's what I feel and internalise. That I'm bad because I'm a fat woman and I'm bad because I'm a lesbian and I'm bad because I'm a woman…. (g1, p5)

Effect of minority stress and depression on risk behaviours

A consistent theme across each group was the perception that stress and depression related to their sexual orientation had an effect on their lives and their health that stress affects the lesbian population more than the heterosexual. One woman said, 'it's probably the top thing…life is stressful enough and our jobs are stressful enough no matter what they are, I mean you are always under stress and then you choose a lifestyle which is unacceptable … it just adds to it' (g1, p7). Another woman

noted a similar concern, 'I think for me a lot of stress and, this is the sole stress factor is … unnecessarily trying to prove I'm OK to the world. I know I'm OK to me'(g2, p10). Several women described their need to have a 'constant vigilance' of their environment that was related to being a lesbian. 'I think there's a kind of gnawing stress of keeping part of yourself hidden and certain conversations don't get full attention because I'm holding back … you pay a price' (g4, p10). Another added, 'for me, at least, there is a regular … very regular scan of my environment, to see if it is safe to talk about certain things, to be physically affectionate…' (g2, p9). Another woman described her source of stress as related to her need for secrecy about being a lesbian, 'I think about keeping a secret all your life or having to keep that in, or keep a secret about anything, never mind about who you are and who you love' (g2, 8).

Several women described the relationship of this stress to their health and health behaviours:

I think we probably do drink more and smoke more … it's the stress'. But, you know, I eat to comfort myself. I … reward myself, that sort of thing, you know…. (g1, p7)

I experience more anxiety than my sister who is straight, you know …. I think anxiety can make you smoke or drink. (g3, p19)

Depression was also noted as common, related to sexual orientation and a major factor in health and health practices, specifically weight-related behaviours. Depression was expressed as pervasive among lesbians. One subject stated that, 'anger and fear and anxiety and depression are unfortunately very much the flavor of being a lesbian' (g3, p16). Others gave explanations for why they thought that anxiety and depression were greater in lesbian populations:

basically because we still are oppressed, we're still put down as women, paid less, it's still … we don't get listened to …, every single one of those things adds to our stress and messes with our self-esteem … and, so what I am saying is I think anger and depression and grief underlie all our experiences in terms of being a lesbian. (g3, p16)

Loneliness, isolation. I mean, it comes and goes because you can be out in some places and not in others. (g2, p9)

There's a shame that I feel when I hear these people out there say, how abominable gay people are and how immoral they are … I internalise it. (g1, p5)

One woman expressed her belief that depression was a factor in why lesbians are overweight: 'I do think depression is a big factor in being overweight and especially with lesbians. Being in a happy relationship helps a lot.' (g3, p13)

Interventions to decrease overweight/obesity

There were several examples of interventions that were not helpful. There was anger expressed that health care providers focused their instructions only on changing their BMI, without mention of their general health. Focus on a number, the BMI, rather than on their individual health and risk, produced anger and reluctance to co-operate in lowering their weight. Many had also been told by their health care provider to 'go lose weight' but had not been given any information or been referred to someone to help them do so.

Other barriers expressed that were not major areas but were mentioned were as follows: (1) lack of accessibility to gyms where they felt comfortable going with their partner; (2) being seen in a place where no one else was overweight; (3) not feeling comfortable in typical workout gear because of their weight and (4) the lack of family membership for same sex partners to gyms.

All of the women agreed that interventions for lesbians that focused on health and decreasing risk of disease would be welcomed by all of them:

I think it gives you the opportunity to do lots of things like acknowledge the social pressures around body image and …,you know, really try to tailor a message that's really positive about being healthful and fit …. I've already said this but, tailoring it to, um … specific experiences of being in the lesbian community. (g2, p9)

They all agreed that having a weight reduction program or group specifically for lesbians would be helpful. They noted that it would eliminate the anxiety about whether to 'come out', and they could feel free to honestly discuss their lives, to bring their partners and to feel 'safe'. 'I'm going to feel safer if there are lesbians there and, um, it's a different culture.' (g3, p16). They did note that focusing on different age groups might be useful because of different attitudes and issues around weight and health. Several noted that there are less lesbian specific community events than there used to be, and that they miss the opportunity to socialise with their own group. They noted that much of the interaction still focuses on going to bars. Several suggested the development of activities for the lesbian community that are health related, with a focus on healthy nutrition, exercise and weight.

Discussion

Lesbians in this sample were aware of the health consequences of overweight and obesity, and most expressed a desire to lose weight to improve their health and fitness (see Table 2 for summary of themes). One of the unique aspects of the findings was the generational differences, with younger

Table 2 Summary of key themes and implications for research and practice

Key themes	Implications for research and practice
1. Generational differences Younger lesbians think that there are no differences in attitudes about weight between lesbians and heterosexual younger women. All younger women want to be thin and look good Older women think that lesbians reject societal norms related to weight that heterosexual women believe	Further research is needed to explore these differences and the reasons for them. Older lesbians related their attitudes to feminist beliefs that related to the time at which they 'came out' as lesbians. Lesbians are not a homogeneous group. Interventions regarding weight may vary with age
2. Acceptance of overweight Lesbians are more accepting of a variety of body images than heterosexual women	Further research is needed to further explore this attitude. Lesbians may be resistant to interventions that focus on changing BMI and body image. They favoured interventions focusing on being healthy generally
3. Minority stress Stress and depression are more common in lesbian women which they attributed to the impact of homophobia on their lives	There needs to be increased sensitivity of health care providers to the needs of lesbian women. Mental health needs and stress reduction need to be addressed with this population
4. Impact of stress and depression on healthy behaviours Lesbians with cardiovascular disease (CVD) risk factors felt that they knew what they should do to be healthy, but stress and depression had a negative effect on their ability to eat well and exercise	Further research is needed on the impact of stress and depression on health behaviours in lesbians. Clinicians should consider the need to include stress reduction and treatment of depression in working with lesbians on behaviour change
5. Attitudes towards participation in weight reduction interventions This group of lesbians with CVD risk were eager to have interventions available that would focus on improving their general health as well as reducing weight	Further research is needed to explore interventions with lesbians. There may be differences in attitude with lesbians who do not perceive themselves as at risk. Clinicians need to focus on reducing weight in the context of interventions that enhance total health rather than focus on only lowering BMI
6. Lesbian specific interventions Participants felt that they would feel safer, more willing to share their lives and less worried about homophobic reactions in a lesbian only group intervention	Further research is needed to explore whether lesbian-specific interventions have a different impact. Clinicians need to be aware of the anxiety and lack of safety that lesbians experience in health care encounters related to homophobia

lesbians being more concerned about being thin and 'looking good' and the older lesbians having beliefs about the social construction of normal body image and weight and more acceptance of all weights and body image. Reasons expressed for these differences were as follows: (1) the perspective of age and life experience; (2) varying beliefs about acceptable body appearance and weight and (3) differences in lesbian identity and socialisation during the time when they 'came out'. These findings are consistent with a study on eating disorders that found that younger lesbian and bisexual women were more likely to have 'borderline bulimia' and to feel pressure to comply with societal standards about weight than the older lesbians and bisexual women in their sample (Feldman & Meyer 2007). A study on lesbians and alcohol consumption also noted generational differences and attributed them to variations in the beliefs during the era, in which they were first socialised as a lesbian (Parks & Hughes 2007). The results of this study suggest that this is also true for weight, because the lesbians who 'came out' during the Women's Movement in the 1960s and 1970s described that they were influenced by feminist beliefs about the social construction of weight and were more likely to be accepting of all body types and weight. A recent study found that younger lesbians, gay men and bisexual individuals, had fewer mood disorders which they concluded is a result of a decrease in minority stress because of liberalisation of social attitudes (Meyer *et al.* 2008).

The other unique theme is that, although there was a general agreement in this sample that lesbians are more accepting of all weights and body shapes than in the heterosexual community (Bergeron & Senn 1998, Swami & Tovee 2006), there is also concern about the impact of this acceptance on health. This study was consistent with others that found lesbians receptive to interventions that focused on health, healthy behaviours and fitness, rather than on weight, BMI and being thin (Bowen *et al.* 2006, Brittain *et al.* 2006). The lesbians in this study all had at least one risk factor for CVD, and 75% were overweight which may have influenced their willingness to participate in interventions to reduce their weight and reduce their risk. They had

self-identified as being at risk. One challenge may be encouraging lesbians who are not aware of or do not perceive themselves as at risk to participate in interventions. These findings reinforce that there may not be homogeneity in the lesbian community with respect to beliefs about weight and outlines the tension and struggle that lesbians often feel between societal norms and those of their own community, as noted in other research (Kelly 2007). Lesbians may have internalised both norms, and although they may reject societal norms, they still feel some level of shame about being overweight.

Minority stress had the greatest reported impact on the health behaviour of participants as has been described previously (Oetjen & Rothblum 2000, McGregor *et al.* 2001, Lewis *et al.* 2003, Meyer 2003, Cochran & Mays 2007). Participants were consistent in their descriptions of the energy consumed every day in being vigilant about their acceptance in the world and, in some instances in keeping their private lives secret. They described shame and anger that they carry because of internalised and societal homophobia that they felt contributes to their depression, anxiety and fatigue. They believed that smoking, drinking and overeating were all methods of soothing themselves and relieving stress, anger and shame.

The women in this study were eager and interested in becoming healthier. They expressed anger at the approaches to weight reduction that they had encountered with health care providers that promoted the BMI as a single indicator of healthy weight. They especially noted their anger at being told to 'go lose weight' without any other advice or support. They felt it was important, as has been found in other studies (Bowen *et al.* 2006, 2008, Brittain *et al.* 2006), that the emphasis is on health and improved function, rather than on being thin or having a normal BMI.

This small sample welcomed the idea of lesbian-specific interventions to improve their health. They felt that this would make discussion of their lives and inclusion of their partners easier and would decrease the anxiety that they often felt about whether 'to come out' in a group. They welcomed group interventions, as well as community events where socialisation revolved around health to encourage cultural as well as personal change. Programs that are integrated and multifaceted, especially including stress reduction and cognitive behavioural therapy in view of the stress and internalised homophobia that was apparent in the groups, may be most successful as has been suggested in other recommendations for risk reduction (Glasgow *et al.* 2004, Goldstein *et al.* 2004). Inclusion of partners and friends as social supports also was noted to be important in long-term success in creating healthy behaviours as also found in the literature on adherence to behaviour change recommendations (DiMatteo 2004, Mookadam & Arthur 2004). A recent study linking a history of childhood sexual abuse to obesity in lesbians also suggests the need for inclusion of mental health components and referral to assist in other concerns that may arise during the process (Aaron & Hughes 2007).

Limitations

The study was designed to minimise the limitations to using focus group interviews, including having a gender concordant interviewer, holding the groups in a safe space and creating a sense of group cohesion among participants. Some concerns that remain are as follows: (1) Group members were not willing to share all that is needed and may not be truthful. (2) The interviewer may have interjected their own bias both in the interviewing process and in interpreting the results. (3) While the sample is small and purposefully selected, the questions are designed to provide in-depth understanding of the issues of interest for this particular population. In addition, the sample is highly educated, with few minority participants, so the findings may be suggestive of unique experiences. Caution should be taken regarding transferability and generalisability of this data because of these factors as it is also impossible to know whether there is a sample bias i.e. those who would volunteer for such a project may have different attitudes and beliefs than other lesbians. In view of this, the researchers should be careful not to apply these findings or make generalisations to other populations. Further research is needed to confirm these findings, including quantitative and mixed method designs.

Conclusion

Previous research has found that lesbians are at risk for CVD and, most specifically, have increased rates of overweight and obesity. These focus group data suggest that lesbians with risk factors for CVD are concerned about their health and eager to be involved in individual and culturally sensitive programs that focus on improved health and well-being. The results suggest that there is not homogeneity among lesbians about beliefs about weight and body image. A unique finding of this study was that there are generational differences in the attitudes towards weight and overweight. Minority stress, anxiety and depression were the major factors in health behaviours and barrier to changing unhealthy behaviours. Homophobia and lack of societal inclusion of lesbians were the factors in the health of this population.

Relevance to clinical practice

These results inform clinicians that lesbians with CVD risk factors are concerned about their health and the health consequences of obesity. This sample expressed anger at clinicians who primarily talked about the BMI as a measure of health, rather than focusing on the other aspects of health. They noted that approaches to reducing overweight and obesity should be related to total overall health rather than focused on decreasing the BMI. Although the findings indicate that lesbians, as had been previously thought, are more tolerant of overweight and obesity, there are individual and generational differences in attitudes towards weight. These findings, however, underscore that lesbians are not a homogeneous group and vary in their attitudes about risk reduction interventions. Recommended interventions include lesbian-specific multidimensional group interventions that could deal with the multiple factors involved in causing and maintaining the behaviours. Lesbian-specific interventions allow for support in the group and decrease fear of homophobia that allows for a more relaxed experience. Multifaceted approaches are particularly important in view of minority stress and the anxiety and depression related to it. Although these interventions may improve the health of lesbians, the overall challenge is to raise sensitivity in all health care providers and especially nurses, to the needs of this population. This sample revealed the amount of anxiety and depression that they felt was related to being part of a stigmatised minority whose needs were often invisible to health care providers.

Acknowledgement

The project was funded through a grant from the Lesbian Health Fund of the Gay and Lesbian Medical Association (GLMA).

Contributions

Study design: SJR, ESS; data collection and analysis: SJR, ESS, RO and manuscript preparation: SJR.

Conflict of interest

None.

References

Aaron D & Hughes T (2007) Association of childhood sexual abuse with obesity in a community sample of lesbians. *Obesity (Silver Spring, Md.)* **15**, 1023–1028.

Aaron DJ, Markovic N, Danielson ME, Honnold JA, Janosky JE & Schmidt NJ (2001) Behavioral risk factors for disease and preventive health practices among lesbians. *American Journal of Public Health* **91**, 972–975.

Bergeron SM & Senn CY (1998) Body image and sociocultural norms. *Psychology of Women Quarterly* **22**, 385–401.

Boehmer U, Bowen DL & Bauer G (2007) Overweight and obesity in sexual-minority women: evidence from population-based data. *American Journal of Public Health* **97**, 1134–1140.

Bowen DJ, Balsam KF, Diergaarde B, Russo M & Escamilla GM (2006) Healthy eating, exercise and weight: impressions of sexual minority women. *Women and Health* **44**, 79–93.

Bowen DJ, Balsam KF & Ender SR (2008) A review of obesity issues in sexual minority women. *Obesity (Silver Spring, Md.)* **16**, 221–228.

Brand PA, Rothblum ED & Solomon LJ (1992) A comparison of lesbians, gay men and heterosexuals on weight and restrained eating. *International Journal of Eating Disorders* **11**, 253–259.

Brittain DR, Baillargeon T, McElroy M, Aaron DJ & Gyurcsik NC (2006) Barriers to moderate physical activity in adult lesbians. *Women and Health* **43**, 75–92.

Case P, Austin SB, Hunter DJ, Manson JE, Malspeis S, Willett W & Spiegelman D (2004) Sexual orientation, health risk factors and physical functioning in the Nurses' Health Study II. *Journal of Women's Health* **13**, 1033–1047.

Cochran SD & Mays V (2007) Physical health complaints among Lesbians, Gay Men and Bisexual and Homosexually experienced Heterosexual individuals: results form the California Quality of Life Survey. *American Journal of Public Health* **97**, 2048–2055.

Cochran SD, Mays VM, Bowen D, Gage S, Bybee D, Roberts SJ, Goldstein RS, Robison A, Rankow EJ & White J (2001) Cancer-related risk indicators and preventive screening behaviors among lesbians and bisexual women. *American Journal of Public Health* **91**, 591–597.

Diamant AL & Wold C (2003) Sexual orientation and variation in physical and mental health status among women. *Journal of Women's Health* **12**, 41–49.

DiMatteo R (2004) Social support and patient adherence to medical treatment: a meta-analysis. *Health Psychology* **22**, 207–218.

Eckel RH, York DA, Rossner S, Hubbard V, Caterson I, St. Jeor ST, Hayman LL, Mullis RM & Blair SN (2004) Prevention Conference VII: obesity, a worldwide epidemic related to heart disease and stroke: executive summary. *Circulation* **110**, 2968–2975.

Feldman MB & Meyer IH (2007) Eating disorders in diverse Lesbian, Gay and Bisexual Populations. *International Journal of Eating Disorders* **40**, 218–226.

Glasgow RE, Goldstein MG, Ockene JK & Pronk NP (2004) Translating what we have learned into practice – principles and hypotheses for interventions addressing multiple behaviors in Primary Care. *American Journal of Preventive Medicine* **27**(2S), 88–101.

Goldstein MG, Whitlock EP & DePue J (2004) Multiple behavioral risk factor interventions in Primary Care. *American Journal of Preventive Medicine* **27**(2S), 61–79.

Heffernan K (1996) Eating disorders and weight concern among lesbians. *International Journal of Eating Disorders* **19**, 127–138.

James WPT (2008) The epidemiology of obesity: the size of the problem. *Journal of Internal Medicine* **263**, 336–352.

Jarrett RL (1993) Focus group interviewing with low-income minority populations: a research experience. In *Successful Focus Groups: Advancing the State of the Art* (Morgan DL ed). Sage Publications Inc, Newbury Park, pp. 184–200.

Kelly L (2007) Lesbian body image perception: the context of body silence. *Qualitative Health Research* **17**, 873–883.

Klein S, Burke LE, Bray GA *et al.* (2004) Clinical implications of obesity with specific focus on cardiovascular disease: a statement for professionals from the American Heart Association Council on Nutrition, Physical Activity and Metabolism: endorsed by the American College of Cardiology Foundation. *Circulation* **110**, 2952–2967.

Krueger R (1988) *Focus Groups: A Practical Guide for Applied Research*. Sage Publications, Inc., Newbury Park.

Lewis RJ, Derlega VJ, Griffin JL & Krowinski AC (2003) Stressors for gay men and lesbians: life stress, gay-related stress, stigma consciousness and depressive symptoms. *Journal of Social and Clinical Psychology* **22**, 716–729.

Matthews AK, Hughes TL, Johnson T, Razzano LA & Cassidy R (2002) Prediction of depressive distress in a community sample of women: the role of sexual orientation. *American Journal of Public Health* **92**, 1131–1139.

McGregor BA, Carver CS, Antoni MH, Weiss S, Yount SE & Ironson G (2001) Distress and internalized homophobia among lesbian women treated for early stage breast cancer. *Psychology of Women Quarterly* **25**, 1–9.

Meyer I (2003) Prejudice, social stress and mental health in lesbian, gay and bisexual populations: conceptual issues and research evidence. *Psychological Bulletin* **129**, 674–697.

Meyer IH, Dietrich J & Schwartz S (2008) Lifetime prevalence of mental disorders and suicide attempts in diverse Lesbian, Gay and Bisexual Populations. *American Journal of Public Health* **98**, 1–6.

Mookadam F & Arthur H (2004) Social support and its relationship to morbidity and mortality after acute myocardial infarction. *Archives of Internal Medicine* **164**, 1514–1518.

Mosca L, Banks DF, Benjamin EJ *et al.* (2007) Evidence-based guidelines for cardiovascular disease prevention in women: 2007 update. *Circulation* **115**, 1481–1501.

Oetjen H & Rothblum ED (2000) When lesbians aren't gay: factors affecting depression among lesbians. *Journal of Homosexuality* **39**, 49–73.

Parks CA & Hughes TL (2007) Age differences in lesbian identity development and drinking. *Substance Use & Misuse* **42**, 361–380.

Patton MQ (1989) *Qualitative Evaluation and Research Methods*, 2nd edn. Sage Publications, Newbury Park.

Plaut T, Landis S & Trevor H (1993) Focus group interviewing and community mobilization: a case study from rural North Carolina. In *Successful Focus Groups: Advancing the State of the Art* (Morgan DL ed). Sage Publications Inc, Newbury Park, pp. 202–223.

Poirier P, Giles TD, Bray GA *et al.* (2006) Obesity and cardiovascular disease: pathophysiology, evaluation and effet of weight loss : an update of the 1997 American Heart Association Scientific State on Obesity and Heart Disease from the Obesity Committee of the Council on Nutrition, Physical Activity and Metabolism. *Circulation* **113**, 898–918.

Polimeni A, Austin SB & Kavanagh AM (2009) Sexual orientation and weight, body image and weight control practices among young Australian women. *Journal of Women's Health* **18**, 355–362.

Razzano LA, Cook JA, Hamilton MM, Hughes TL & Matthews AK (2006) Predictors of mental health services use among lesbian and heterosexual women. *Psychiatric Rehabilitation Journal* **29**, 289–298.

Reynolds FD & Johnson DK (1978) Validity of focus group findings. *Journal of Advertising Research* **18**, 21–24.

Richards L (2005) *Handling Qualitative Data: A Practical Guide*. Sage Publications, London.

Roberts SA, Dibble SL, Scanlon JL, Paul SM & Davids H (1998) Differences in risk factors for breast cancer: Lesbian and heterosexual women. *Journal of the Gay and Lesbian Medical Association* **2**, 93–101.

Roberts SA, Dibble SL, Nussey B & Casey K (2003) Cardiovascular risk in lesbian women. *Women's Health Issues* **13**, 167–174.

Rothblum E, Factor R & Aaron D (2002) How did you hear about the study? Or, how to reach lesbian and bisexual women of diverse ages, ethnicity and educational attainment for research projects. *Journal of the Gay and Lesbian Medical Association* **6**, 53–59.

Ryan D (2007) Obesity in women: a life cycle of medical risk. *International Journal of Obesity* **31**, S3–S7.

Solarz A (1999) *Lesbian Health: Current Assessment and Directions for the Future*. Institute of Medicine. National Academy Press, Washington, DC.

Swami V & Tovee MJ (2006) The influence of body mass on the physical attractiveness preferences of feminist and nonfeminist heterosexual women and lesbians. *Psychology of Women Quarterly* **30**, 252–257.

Valanis BG, Bowen DJ, Bassford T, Whitlock E, Charney P & Carter RA (2000) Sexual orientation and health. *Archives of Family Medicine* **9**, 843–853.

Yancey AK, Cochran SD, Corliss HL & Mays VM (2003) Correlates of overweight and obesity among lesbian and bisexual women. *Preventive Medicine* **36**, 676–683.

 © 2010 Blackwell Publishing Ltd,