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Research paper

Comparing women with and without disabilities in five-site "Healthy Weight" interventions for lesbian/bisexual women over 40

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ABSTRACT

Background: Lesbian/bisexual women with physical disabilities (LBPD) are an under-studied population.
Objectives: This study compared LBPD to LB women without physical disabilities as defined by the Americans with Disabilities Act on socio-demographic variables, health characteristics, and quality of life, physical activity, weight, and nutrition outcomes following a health intervention.
Methods: Data came from the Healthy Weight in Lesbian and Bisexual Women Study (HWLB) where 376 LB women were recruited into five geographically dispersed interventions. Baseline data were examined to compare women with and without physical disabilities as defined by the ADA, and pre/post intervention data were analyzed for differences in treatment outcomes including quality of life, physical activity, nutrition, and body size.
Results: Compared to women without disability, LBPD were more likely to be bisexual or another sexual identity than lesbian, single, report poor or fair health status, postmenopausal, and had a higher body mass index and waist circumference to height ratio. LBPD women were less likely to work and to drink heavily, and reported reduced physical and mental health quality of life. In spite of these differences, after the intervention, LBPD had similar outcomes to women without disabilities on most measures, and were more likely to show improvements in physical quality of life and consumption of fruits/vegetables.
Conclusions: Although different from women without disabilities on many socio-demographic and health variables at baseline, the study suggests that LBPD have similar outcomes to women without disabilities, or may even do better, in group health interventions.

Approximately five percent of the U.S. population self identifies as lesbian, bisexual, or other non-heterosexual identities,[1] yet health intervention research has largely ignored this group.[2,3] Women with disabilities are rarely included in research, although there is growing evidence that lesbian and bisexual (LB) women are more likely to have a disability than heterosexual women.[4–14] One in ten U.S. citizens has a disability and the likelihood of having a disability increases with age.[15] Research historically emphasized a medical model of disability and ignored the effects of culture, stigma, and structural barriers as experienced by other socially constructed oppressed identities.[16–18] A trend is to consider disability status as one of many social identities associated with health disparity.[19] Health status is dynamic and influenced by health promotion activities[20] and one's social and physical environment such as relationship status, community belongingness, societal and interpersonal discrimination, barriers to physical mobility, and healthcare access.[21]

Compared to people without disabilities, people with physical disabilities are more likely to carry excess weight.[22,23] Reasons for this include: challenges in accessing physical activity venues, thus being more sedentary[24]; not accessing healthy food, such as not having independent choice in selecting foods, lack of time, energy, or money to prepare healthy meals; being on medications that

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promote weight gain; having difficulty shopping; and/or having caregivers who choose calorie-dense but less nutritious convenience foods.[25]

This study compares LBPD to LB women without physical disabilities on baseline characteristics and changes in nutrition, physical activity and quality of life following an intervention designed for LB women. A federally funded project initiated by the Department of Health and Human Service's Office on Women's Health (OWH) addressed the well-documented finding that LB women have an average larger body size than heterosexual women[26] as well as other mental and physical health disparities.[27] The OWH funded five sites under the *Healthy Weight in Lesbian and Bisexual Women: Striving for a Healthy Community Initiative* (HWLB) for LB women aged 40 and older. Healthy weight was defined as the physical state at which health risks and conditions are reduced to normal ranges or functional and psychosocial status is improved. The HWLB program was designed to address the consequences of excess weight in LB populations, but recruitment materials focused on making healthy choices rather than weight loss because of sensitivity to weight loss programs among many LB women.[28] Objectives of the project were to increase consumption of fruits and vegetables, physical activity, and quality of life; decrease consumption of sugar-sweetened beverages and alcohol; and reduce weight and waist circumference.[29]

Disability among sexual minority women

Many state and national health surveillance surveys added questions about sexual identities in recent years, increasing the ability to compare LB women to heterosexual counterparts. Some surveys include questions about disability status, although they are varied, making it challenging to compare findings across studies. Cochran and Mays[6] found that more lesbian (13%) and bisexual women (12%) were on disability income than heterosexual women (5%), but this question did not separate physical from other types of disability. One study[9] asked adult residents of Washington "Are you limited in any way in any activities because of physical, mental, or emotional problems?" They found 25% of heterosexual women said yes, compared to 36% of lesbians and 36% of bisexual women. When they examined only women over age 50, the numbers were almost identical: heterosexual = 25%; lesbian = 37%; and bisexual = 35%.[10] Studies report higher rates of disability for LB women, but do not provide information on their lived experience, health, or sociodemographic characteristics.[4–14] These studies rarely distinguish between mental, physical, and sensory disabilities that may have different impact on health.

Characteristics of sexual minority women with disabilities

Women with disabilities are largely invisible in the research on LB women's health, partly because of a myth that women with disabilities are asexual or heterosexual.[30–35] Some women may be excluded from research studies because of their disabilities, either because research sites are not accessible or recruiting efforts do not reach them.[36]

A qualitative study of LGBT people with disability[37] identified four themes: 1) physical wellness was related to pain and being aware of the needs of the physical body; 2) emotional vitality included being free of negative emotions, having a sense of control, and self-acceptance of the disability; 3) functionality related to conducting daily activities of living with some independence; and 4) social engagement referred to having a community of LGBT and others. These themes were similar to definitions of health provided by LB women (disability status not reported), who focused on having sufficient energy and vitality.[38]

One of the few empirical studies of sexual minority women with disabilities came from the HWLB[39] and compared 52 women with and 74 without physical disabilities on demographic, sexual orientation, and health variables. LBPD felt less connection to sexual minority women's communities, and were less satisfied with the social support they got from their communities. More LBPD reported PTSD (43% of women with disabilities and 14% of non-disabled women), but did not differ on history or current symptoms of depression. LBPD had significantly higher weights and waist circumference to height ratio, were more likely to have experienced weight cycling (losing and regaining 20 pounds or more), and had a higher mean BMI: 50% of women with disabilities had a BMI of 35 or higher, compared to 30% of non-disabled women. Women with disabilities were also more likely to report diabetes, arthritis, chronic pulmonary lung disease, asthma, limitations in movement and energy, and greater pain, but did not differ on mental health quality of life.

In conclusion, the sparse literature suggests that LB women are more likely to report a disability, but we know little about their disabilities or health needs. In one pilot study using HWLB data, LBPD had larger body size and more health and functional limitations than non-disabled women, but no studies suggest whether they respond to health interventions in the same way.[39]

Methods

This study expands on the pilot study[39] using data from all five HWLB sites, analyzing: 1) baseline characteristics to see if LBPD were different than women without disabilities in the 376 women enrolled in the study on socio-demographic and health variables; and 2) changes in health status and health promotion behaviors of 266 women who completed the intervention.

The interventions

This project pools data from five health intervention projects with a common core survey administered pre and post interventions. Each intervention was slightly different,[40] but all included nutrition education, physical activity, and group support and education provided in 12 or 16 weekly sessions with content grounded in LB women's context. The five sites are described in Table 1. Overall results of the five interventions are described elsewhere.[29] The majority (75%) of the LBPD came from the two San Francisco Bay Area sites.

Participant recruitment

Participant recruitment varied from site to site, but all used local community organizations, events, newsletters, websites, and/or listservs to advertise their programs; some recruited at lesbian community events and two sites recruited patients at medical clinics; each site determined sample sizes to detect treatment effects prior to recruiting.[41] Sample inclusion criteria included age 40 and over, identification as lesbian or bisexual, and BMI (body mass index) over 25 or self-identified as overweight and interested in 'getting healthier.' Whereas 376 women enrolled in the study and completed the baseline survey, because of scheduling challenges, only 266 completed any intervention component and completed both pre- and post-intervention surveys. The study was approved by each sites' respective institutional review board.

Instruments

All five sites collected data at baseline and at the end of a 12 or 16 week-long intervention period. The data collection method