



Health and Wellbeing among Lesbians, Bisexual, and Sexually Diverse Women in Aotearoa New Zealand: An Exploratory Study

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Abstract

Introduction Compared to other western, English-speaking, nations there is limited research on health outcomes in LGBTQ+ people in New Zealand; particularly among women. This study set out to explore health and wellbeing in sexual minority women with particular reference to differences between subgroups (i.e., lesbians; bisexual women; sexually diverse women).

Methods This study utilizes data from an online survey of participants recruited in NZ in 2022 as part of the Global Pride Project. The analysis reported here is based on the responses of 67 sexual minority women on measures of health and wellbeing (e.g., general health, depressive symptomatology, quality of life, social support, community engagement).

Results A primary finding of the study was that while sexual identity was a significant predictor of general health it was not a predictor of other study outcomes. Community engagement and social support were found to be significant associations of depressive symptomatology. Social support was also found to be a significant predictor of quality of life. Age was also a predictor of quality of life, with younger sexual minority women reporting lower quality of life.

Conclusion The findings suggest that community engagement and social support play an important role in wellbeing; especially for specific subgroups of sexual minority women, which may be potential targets to improve sexual minority women's health and well-being. Additional research with larger sample sizes is needed.

Social policy implications The findings of this study underscore the need for sexual minority women to be specifically included in research, interventions and social policy aimed at ensuring health equity.

Keywords Lesbian · Bisexual · Sexually diverse · LGBTQ+ · Health outcomes · Wellbeing

Introduction

New Zealand (NZ), or Aotearoa (the Māori name for these lands), is an island nation located in the South Pacific with a culturally diverse population. In the 2023 census (Stats NZ, 2025), NZ's population reached almost five million people, including primarily those of European descent (68%) with those of Māori (the descendants of the indigenous peoples of NZ), Pacific Islands, and Asian backgrounds each comprising a sizeable minority of the population. Due to the

country's long history of inward migration and several generations of intermarriage, many New Zealanders – including those of European descent – identify with more than one ethnic group.

As established in *Te Tiriti o Waitangi* (The Treaty of Waitangi), the nation's founding document, NZ is a bicultural country that draws on the traditions of both Māori and European (primarily British) early settlers (Johnson, 2023). As a nation colonised by the British in the early 1800s, the country's institutions (law, government, education) were based on a British model, English was established as the lingua franca, and the indigenous Māori peoples were subjected to ongoing forms of colonisation (Paora et al., 2011). For more than 50 years Māori have reclaimed their right to speak *te reo Māori* (the Māori language) and practice *tikanga Māori* (Māori customs and practices). Given the sociohistorical distance travelled since colonisation, NZ culture today comprises a complex interweaving of both

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western and Māori cultural traditions and values, making our nation distinct from other English-speaking colonised nations (e.g., Australia, Canada, or the US). Although missionaries from a range of Christian denominations were among the early settlers, NZ was established as a secular nation and therefore has no state religion (Griffiths, 2009).

Sexual and Gender Minorities in New Zealand

In NZ those who identify as LGBTQ+ (lesbian, gay, bisexual, trans, queer, as well as other sexually and gender diverse people), *takatāpui* (Māori people who are diverse in sexuality and/or gender), and MVPFAFF+ (an initialism representing a range of sexualities/gender identities across Oceania, namely, *māhu*, *vakasalewalewa*, *Palopa*, *fa’afafine*, *akava’ine*, *fakafafine*, and *fakaleiti*) are commonly referred to as the ‘rainbow community’. In this paper the initialism LGBTQ+ will be used to refer to all sexuality and gender identities encapsulated within the NZ rainbow community.

In NZ today, LGBTQ+ people are generally accepted in society and afforded the full range of legal rights and protections. Homosexual acts between consenting men were legalised in 1986 with the institution of the Homosexual Law Reform Act (Laurie, 2004). Subsequently, discrimination on grounds of sexual orientation was outlawed in 1993 through the Human Rights Act. In 2004 same-sex couples were afforded legal recognition through the Civil Union Act, and equal rights to marriage and the adoption of children were extended to same-sex couples through the Marriage (Definition of Marriage) Amendment Act in 2013 (Brickell, 2022). Also, practices (psychological and religious) that attempt to change the sexual orientation or gender identity of individuals were made illegal in 2022 (Roguski & Atwool, 2024).

It is important to note that despite widespread inclusion, many LGBTQ+ people in NZ are still marginalised; particularly those from minority cultural groups with strong Christian or Muslim ties (e.g., New Zealanders of Pacific Island descent; migrants and refugees from Asian and Middle Eastern countries) and those who are gender diverse. Although in precolonial Māori society same-sex relationships and activity (*takatāpui*) was widely accepted, conversion to Christianity and the institution of British conservatism through colonisation, has meant that – even today – same-sex relationships/activity are not readily accepted by everyone within Māori communities (Kerekere, 2021).

The recently released statistics on sexual and gender diversity from the 2023 NZ census indicate that 4.9% of adults identify as LGBTQ+ (Stats NZ, 2025). Of the 144,960 people who reported a sexual identity other than heterosexual, 32.9% identified as gay or lesbian, 54.0%

as bisexual, and 13.1% as another diverse sexual identity (e.g., *takatāpui*, asexual, pansexual). These figures are similar to the percentages reported in other national surveys in NZ (e.g., NZ Health Survey). However, for a range of reasons (including variations in how questions are framed) it is likely that these are an underestimate of the LGBTQ+ population. While the census is designed to count the whole population, some may not have felt comfortable about identifying as sexually diverse and/or opted not to answer the question about sexual identity. It is also likely that sexually diverse people from ethnic minority communities are under-represented due to intersectional challenges of identifying as non-heterosexual within ethnic minority communities (Simon-Kumar et al., 2025). In contrast, the proportion of young people identifying as sexually diverse is likely to be greater than in older cohorts. This trend is reflected in the Youth19 study where 9% of 14–18 year olds in NZ, identified as same- or multiple-sex attracted.

Sexual Minorities and Social Policy in New Zealand

Over the past two decades, significant changes have ensured that in NZ sexual minorities and same-sex couples are afforded the same benefits as heterosexuals in social policy (McMartin & Brickell, 2021). For example, a same-sex couple is treated the same as a heterosexual couple in social policy regardless of whether they are married, civil partnered, or unmarried. Similarly, the same-sex partner of a woman who has given birth has the same legal status as a male partner would have when the child has been conceived through assisted reproduction. However, sexual minorities are not consistently included in social policy. Sexual minorities are explicitly mentioned in some policy documents (e.g., the NZ Health Strategy; Sex and Relationships Education guidelines). However, inclusion is more commonly through generic statements such as “to improve health outcomes for all New Zealanders” (NZ Government, 2023a, p.4) or “all older populations in New Zealand are supported to age well” (NZ Government, 2016, p. 24) whereby sexual minorities are included by inference. This ignores the ways in which sexual minorities may experience life/health differently from cisgender, heterosexual people, may be ‘at risk’ (e.g., in mental health), and/or may experience systemic disadvantage. In the Women’s Health Strategy sexual minority women are only included by inference in the statement “diverse groups of women” (NZ Government, 2023b, p.5) with no consideration of how sexual diversity invariably impacts many areas of women’s health. Furthermore, sexual minorities are not listed in the “priority populations” discussed in the Healthy Ageing Strategy (NZ Government, 2016, p.34). A summary of the extent to which sexual minorities are included in NZ social policy is provided below.

Sexual Minorities in NZ Policy

Social security—The Human Rights Act 1993 made it illegal to discriminate on grounds of sexual orientation. Same-sex couples were first able to receive legal recognition when the Civil Union Act came into effect in 2004. Subsequently, the passing of The Marriage (Definition of Marriage) Amendment Act in 2013 afforded same-sex couples marriage equality. Same-sex couples who are married, have entered a civil union, or are in a defacto relationship (i.e., those who have cohabited for at least 3 years but not legally married/partnered) are entitled to the same rights and protections as heterosexual couples with the same marital status. This applies to all areas of policy including social security payments (e.g., unemployment benefit), property ownership, and the dissolution of a relationship (Brickell, 2022).

Education—Relationships and Sex Education (RSE) policy stipulates that schools should build a culture in which gender and sexual diversity are valued and students feel safe in the school environment. The policy guidelines specifically mention welcoming diverse families to school events and referring to diverse family structures in primary school, and the recognition and affirmation of sexual diversity in the teaching of RSE and the inclusion of sexual diversity in the wider school context in secondary school (Ellis & Bentham, 2021). However, the Ministry of Education withdrew these guidelines in early 2025 reverting to the outdated and non-inclusive 2007 guidelines.

Health—Sexual minorities are typically implicitly included through generic statements of inclusivity and are not listed as a priority population in health policy. Women's health policy is increasingly inclusive of gender diversity but explicit consideration of sexual minority women is very limited (Ellis, 2025). Information about sexual orientation is not usually collected in healthcare and medical settings (Ludlam et al., 2024).

Sexual Minorities and Wellbeing in New Zealand

In comparison to other western, English-speaking, nations (e.g., Australia, US, UK) there is relatively little recent research focusing on the wellbeing of sexual minorities in NZ. In relation to psychological wellbeing (e.g., mental health, psychological distress, depression) international research (e.g., Fredriksen-Goldsen et al., 2013; Wittgens et al., 2022) indicates that at least some sexual minorities experience noticeably poorer mental health than do heterosexual people. Similar patterns have been found in NZ research. In a longitudinal birth cohort study (Spittlehouse et al., 2019) bisexual people were found to have the highest odds ratio of major depression followed by lesbians and gay men. The odds ratio of depression was lowest for heterosexual people. In a study comparing bisexual and pansexual people (Greaves et al., 2019), pansexual people experienced greater psychological distress than those identifying as bisexual. Similarly, a NZ study of life satisfaction, average affect, and happiness (Bejakovich & Flett, 2018) found significant differences between sexual minorities and heterosexuals. No statistically significant differences were found between levels of life satisfaction, affect, and happiness for lesbian, gay, bisexual, and queer people. However, when controlling

for certainty (i.e., how certain are you of your sexual orientation?) both heterosexual and bisexual participants had significantly higher levels of life satisfaction than gay-/lesbian-identified participants. Furthermore, in a comprehensive NZ study (Veale et al., 2019) trans and non-binary (TNB) people (some of whom will also claim a sexual minority identity) showed significantly elevated levels of psychological distress.

In the international literature (e.g., Jaspal et al., 2023; Krueger & Upchurch, 2022), social support has consistently been foregrounded as an important factor for providing resilience against minority stress. However, research indicates that sexual minorities in NZ do not necessarily have the support networks and social connections that they would ideally like. For example, in a focus group and survey study of LGBTQ+ people in Christchurch/Ōtautahi (NZ's third largest city, popn. 383,000) 44% of participants indicated that they didn't have enough connection to the LGBTQ+ community and with few queer venues and spaces there was limited visibility for LGBTQ+ people. This is reflected in studies of older sexual minority New Zealanders, whose participants felt particularly isolated in that provision was often youth-focused (Betts, 2021; Dickson et al., 2023). However, given the geographically dispersed nature of NZ's relatively small population, there are few opportunities to connect with the LGBTQ+ community except if you are young and residing in a larger city.

While existing research offers some insight, to date there have not been any studies undertaken in NZ that explore a range of social and health outcomes (e.g., general health, depressive symptomatology, quality of life, social support, community engagement) in sexual minorities. Also, there is a tendency for studies – both in NZ and overseas – to focus on LGBTQ+ people as a collective rather than exploring social and/or health outcomes for respective subgroups. Where the focus is specifically on sexual minorities (e.g., Bejakovich & Flett, 2018; Spittlehouse et al., 2019) analyses are commonly divided into the subgroups lesbian/gay and bisexual masking any differences that might arise due to gender inequalities. Given that data from lesbians and gay men is usually aggregated, little is known about health outcomes of sexual minority women in NZ. Furthermore, the categorisation of participants into the binary categories lesbian/gay and bisexual ignores those who are sexually diverse but who do not identify with those labels; including those who are young and/or gender diverse.

Purpose of this Study

Utilizing varied measures, including general health, depressive symptomatology, and quality of life, this study

investigates the health and wellbeing of lesbians, bisexual women, and sexual diverse women in NZ. Secondly this study aims to investigate whether there were any differences in health and wellbeing as a function of sexual identity (i.e., lesbian vs. bisexual vs. sexual diverse).

Methods

This study comprises a descriptive, cross-sectional design using data from participants recruited in NZ as part of the Global Pride Project (see introductory chapter in this special issue). In total, 109 LGBTQ+ adults completed the Global Pride Project survey in NZ. However, this study specifically assesses health outcomes of sexual minority women ($n=67$).

Participant Recruitment and Data Collection Procedures

The recruitment strategy for the NZ segment of the Global Pride Project involved a comprehensive approach to engage LGBTQ+ adults aged 18 and older. Collaborations with local community agencies and organizations (e.g., LGBTQ+ groups) played a pivotal role, leveraging their email and mailing lists to disseminate study announcements. To maintain participant anonymity these announcements, which contained inclusion criteria and survey links, were sent directly from the first author to LGBTQ+ organisations for distribution to their mailing lists and/or post on their social media platforms. Collaboration with an online research participant recruitment company, further broadened access to potential participants, offering a diverse pool aged 18 and older. Eligibility criteria for this study required participants to reside in NZ, be 18 years or older, and identify as LGBTQ+. The study had no specific exclusion criteria beyond failing to meet the outlined inclusion criteria.

Data collection for the Global Pride Project NZ was completed in 2022 and primarily involved administering an anonymous survey covering various domains, including health status, access to healthcare, social connectedness, economic security, and demographic information. Materials were pilot tested for accuracy and readability. Utilizing Qualtrics for online administration, the survey was self-administered and anonymous, taking approximately 15 min to complete. As a token of appreciation, participants were given the opportunity to enter a raffle draw to win a gift pack. There was no connection between participation in the raffle and survey responses.

The study upheld ethical standards, ensuring participant anonymity and confidentiality throughout data collection.

All collected data was de-identified, and approval was obtained from the University of Washington Institutional Review Board (ID: STUDY00013402). In accordance with requirements for undertaking research in NZ, approval was also secured from the University of Waikato Human Research Ethics Committee (HREC[health]2021#55).

Measures

Demographic Characteristics Age was calculated by subtracting birth year from the year of data collection (2022). Participants were asked to select the sexual identity category that best represented how they think of themselves. The options included gay, lesbian, bisexual, heterosexual or straight, and not listed above (referred to as sexually diverse). For this study, we focused on lesbian women, bisexual women, and sexually diverse women. Those who identified their current gender as woman or transgender woman were included in the analyses. Respondents who were under 18, lived outside of NZ, identified as cisgender heterosexual, or were men/transmen were omitted from the analyses. For education, participants were asked “How many years of school, including higher education have you completed?.” A dichotomous variable was created to form two groups: high school or less (coded as 0) and college/university or more (coded as 1). Participants were asked if they were currently married or partnered. A dichotomous variable was created to form two groups: married/partnered (coded as 1) and not married or partnered (coded as 0). Participants were also asked about their ethnicity, which was collapsed into three groups: NZ European/Pākehā only, Māori, and other. Participants who selected Māori with another ethnicity were considered Māori. The “other” category included those who identified as Indian, Chinese, Korean, Japanese, and South Asian.

General Health Participants were asked to rate their health on a scale of (1) excellent to (5) poor. General health was reverse coded so higher values indicated higher self-rated general health (Centers for Disease Control and Prevention, 2001; Fredriksen-Goldsen et al., 2023; Ware, 2000).

Depressive Symptomatology Depressive symptomatology was assessed adapting the 6-item Kessler Psychological Distress Scale (K6) (Kessler et al., 2002). Participants were asked “During the past 30 days, about how often did you feel...” nervous, hopeless, restless or fidgety, relaxed, blue and nothing could cheer you up, that everything was an effort, and worthless. Response options were on a scale of (1) all of the time to (4) none of the time. The items were reverse coded and summed, scores ranging from 0 to 24

with higher scores suggesting higher psychological distress (Cronbach's $\alpha=0.88$).

Quality of Life Participants were asked to rate their quality of life on a scale of (1) very poor to (5) very good (Bonomi et al., 2000; World Health Organization, 2004).

Social Support The abbreviated 4-item scale (Gjesfjeld et al., 2008) of the MOS-Social Support Scale (Sherbourne & Stewart, 1991) was used to measure multiple dimensions of perceived social support (i.e., tangible, informational, positive social interaction, affectionate). Participants were asked "Please indicate how often the following type of support is available to you if you need it." Types of support included "someone to help with daily chores if you were sick", "someone to turn to for suggestions about how to deal with a personal problem", "someone to do something enjoyable with", and "someone to love and make you feel wanted." Response options ranged from (1) never to (5) very often. The mean across the four social support items was calculated. The scale had been previously tested with LGBTQ+ populations in differing cultural contexts (Fredriksen-Goldsen et al., 2013, 2014; Kim et al., 2024) and found to be reliable (Cronbach's $\alpha=0.83$).

Community Engagement Participants were asked to indicate the extent to which they agree with each of the following: I feel part of this community, I help other people in this community, I get help from this community, I am active or socialize in this community. Response options ranged from (1) strongly disagree to (6) strongly agree. Mean of the four community/items (Cronbach's $\alpha=0.85$). This measure was adapted from previous measures of LGBT community engagement (Fredriksen-Goldsen & Kim, 2014; Frost & Meyer, 2012; Lin & Israel, 2012).

Statistical Analyses All statistical analyses were conducted using Stata 16.1 software. To begin, frequencies and descriptive statistics were computed to examine the background characteristics and means of the study variables across the entire sample. Following this, comparisons of study variables among lesbian, bisexual, and sexual diverse women were made using appropriate statistical methods, such as chi-square tests or one-way ANOVA analyses, depending on the nature of the data. Subsequently, bivariate correlation analyses were conducted and we assessed multicollinearity among key study variables. No evidence of multicollinearity was found. Next, regression analyses were employed to examine the associations between sexual identity, along with other demographic variables (e.g., age, education) and social associations (e.g., community engagement and social support), and health outcomes (including general health, depressive

symptomatology, and quality of life). Ethnicity was not included in the regression analyses due to small sample sizes in some of the groups (listed below). Model 1 incorporated sexual identity, while Model 2 included other demographic variables and social associations in addition to sexual identity.

Results

The full NZ sample of the Global Pride Study ($n=109$) was comprised of participants with a mean age of 32.4 years. The sexual identity distribution included 9.2% gay men, 22.0% lesbian women, 24.8% bisexual women, 6.4% bisexual men, and 37.6% sexually diverse individuals (e.g., queer; pansexual). Additionally, 24.3% identified as transgender. The majority of participants (69.7%) had some college/university education or more, and 30.3% had a high school education or less. In terms of relationship status, 56.5% were married or partnered, while 43.5% were not. In terms of ethnicity, 65.1% of participants were NZ European/Pākehā, 11.9% Māori, and 22.9% other.

This specific study focuses on women in the NZ sample ($n=67$). Table 1 shows the background characteristics of the study sample of women. The participants had a mean age of 31.3 years, with ages ranging from 19 to 79. Among the participants, 22 identified as lesbian, comprising 32.8% of the sample, while 27 identified as bisexual, representing 40.3%. Additionally, 18 participants identified as sexually diverse, accounting for 26.9% of the sample. Four participants identified as transgender women; 2 transgender women identified as lesbian and 2 identified as sexually diverse. Regarding

Table 1 Global pride study: background characteristics of new Zealand women ($n=67$)

Variable	<i>n</i>	M or % (95% CI)
Age	64 (range: 19–79)	31.3 (28.2, 34.5)
Sexual identity		
Lesbian	22	32.8 (22.5, 45.1)
Bisexual	27	40.3 (29.1, 52.6)
Sexually diverse	18	26.9 (17.5, 38.9)
Transgender women	4	6.0 (2.2, 15.1)
Ethnicity		
New Zealand European/Pākehā	47	70.2 (58.0, 80.0)
Māori	5	7.5 (3.1, 16.9)
Other	15	22.3 (13.8, 34.1)
Education		
High school or less	23	34.3 (23.8, 46.6)
College or more	44	65.7 (53.3, 76.2)
Relationship status		
Married/Partnered	42	62.7 (50.4, 73.6)
Not married/partnered	25	37.3 (26.4, 49.6)

educational background, 34.3% of the participants had a high school education or less, while 65.7% had some college/university education or more. In terms of relationship status, 62.7% of the participants were married or partnered, while 37.3% were not. Among women 70.2% of participants were NZ European/Pākehā, 7.5% were Māori, and 22.4% other.

Table 2 displays a comparison of the study variables between the subgroups. Lesbian women were significantly older than bisexual women (contrast=11.3, $p=.007$) and reported significantly better general health than sexually diverse women (contrast=0.9, $p=.017$). No other significant differences were found.

Given the small sample size we could not determine the statistical significance of the differences we found between Māori and “other” ethnicity group. However, descriptive findings do show a greater proportion of Māori women were bisexual (11.1%) compared to lesbian (4.6%) or sexual diverse (5.6%). Similarly, there were a greater proportion of participants with an “other” ethnicity who were bisexual (29.6%) compared to lesbian (18.2%) or sexual diverse (16.7%). Additionally, the average age of Māori women in the sample was 35.2 (SD=17.2), while the average age of NZ European/Pākehā women was 31.6 (SD=13.3) and

women listed as ‘other’ was 28.9 (SD=9.1). Within education, 60% of the sample of Māori women, 36.2% of NZ European/Pākehā women, and 20% of women listed under ‘other’ reported high school or less. Four out of five Māori women in the sample (80%) were married or partnered, while 57.5% of NZ European/Pākehā women and 73.3% of women under ‘other’ were married or partnered. Social support was similar across ethnicity groups (Māori women: $M=4.3$, $SD=0.9$; NZ European/Pākehā women: $M=4.0$, $SD=1.0$; Other women: $M=4.2$, $SD=0.8$), as was community engagement (Māori women: $M=3.9$, $SD=1.1$; NZ European/Pākehā women: $M=3.9$, $SD=0.9$; Other women: $M=3.2$, $SD=1.0$).). In terms of health outcomes, Māori women in the sample scored higher on depressive symptomatology ($M=12.4$; $SD=6.4$) compared to women in the other two ethnicity groups (NZ European/Pākehā: $M=8$, $SD=6.1$; Other: $M=7.5$, $SD=4.8$), although had similar scores on the other health outcomes, including general health (Māori, $M=3.2$; $SD=0.8$; NZ European/Pākehā: $M=3.5$; $SD=1.0$; Other, $M=3.5$; $SD=0.9$) and quality of life (Māori women, $M=3.8$, $SD=1.1$; NZ European/Pākehā women, $M=3.9$, $SD=0.8$; Other women: $M=4.1$, $SD=0.7$).

Table 3 displays the results of the regression analyses. In examining associations of general health among lesbian, bisexual, and sexual diverse women in NZ, significant associations were found. In Model 1, sexual diverse women showed significantly poorer general health ($b = -0.86$, $p=.006$) compared to lesbian women, while no significant difference was found for bisexual women. In Model 2, sexual diversity remained a significant predictor of general health ($b = -0.66$, $p=.048$), indicating that sexual diverse women had poorer general health compared to lesbian women, even after controlling for other factors. No significant differences in general health were found between lesbian and bisexual women. Furthermore, having attained some college/university education or higher was associated with better general health ($b=0.56$, $p=.034$) in Model 2.

In examining associations of depressive symptomatology among lesbian, bisexual, and sexually diverse women in NZ, significant associations were found. In model 2, community engagement ($b= -1.98$, $p=.010$) and social support ($b= -1.72$, $p=.019$) were negatively associated with depressive symptomatology. No significant differences in depressive symptomatology were observed between bisexual and lesbian women or between sexually diverse and lesbian women in either model.

No significant differences in quality of life were observed between bisexual and lesbian women or between sexually diverse and lesbian women in either model. In model 2, age ($b=0.03$, $p<.001$), having some college/university education or more ($b=0.53$, $p=.005$), and social support ($b=0.27$, $p=.004$) were positively associated with quality of life.

Table 2 Difference in study variables between lesbian, bisexual and sexual diverse women ($n=67$)

	Lesbian women ($n=22$)	Bisexual women ($n=27$)	Sexual Diverse women ($n=18$)	Sig-nifi-cance test
	m(SD)/%	m(SD)/%	m(SD)/%	p
Age (m(SD))	38.7 (18.2) ^a	27.4 (9.3)	29.5 (5.1)	0.008
High school or less (%)	31.8	48.2	16.7	0.089
Married/partnered (%)	59.1	63.0	66.7	0.885
Ethnicity (%)				0.617
New Zealand European/Pākehā	77.3	59.3	77.8	
Māori	4.6	11.1	5.6	
Other	18.2	29.6	16.7	
Social support (m(SD))	4.0 (1.0)	4.2 (0.8)	3.9 (1.1)	0.502
Community engagement (m(SD))	4.0 (0.9)	3.8 (0.8)	3.4 (1.1)	0.112
General health (m(SD))	3.9 (0.9) ^b	3.5 (0.9)	3.0 (1.0)	0.021
Depressive symptomatology (m(SD))	6.8 (4.6)	9.0 (6.0)	8.7 (7.0)	0.400
Quality of life (m(SD))	4.1 (0.9)	4.0 (0.9)	3.8 (0.7)	0.630

Lesbian, bisexual, and sexual diverse groups in this table are limited to those who identified as a woman or transgender woman. 2 transgender women in lesbian group and 2 transgender women in sexual diverse group

^a Lesbian women significantly older than bisexual women (contrast=11.3, $p=.007$)

^b lesbian women significantly better general health compared to sexual diverse women (contrast=0.9, $p=.017$)

Table 3 Associations of general health, depressive symptomatology, quality of life among lesbian, bisexual, and sexual diverse women in new Zealand ($n=64$)

	General health						Depressive symptomatology						Quality of life						
	Model 1			Model 2			Model 1			Model 2			Model 1			Model 2			
	b	se	p	b	se	p	b	se	p	b	se	p	b	se	p	b	se	p	
Sexual Identity (ref=lesbian)																			
Bisexual women	-0.38	0.27	0.165	-0.06	0.30	0.850	2.18	1.69	0.200	0.46	1.71	0.786	-0.13	0.24	0.598	0.35	0.22	0.114	
Sexual Diverse women	-0.86	0.30	0.006	-0.66	0.32	0.048	1.90	1.87	0.311	-0.09	1.83	0.962	-0.26	0.27	0.339	0.11	0.23	0.639	
Age				0.01	0.01	0.280				-0.09	0.06	0.114				0.03	0.01	0.000	
Education (ref=high school or less) some college or more				0.56	0.26	0.034				-2.43	1.44	0.097				0.53	0.18	0.005	
Community Engagement				0.20	0.13	0.140				-1.98	0.75	0.010				0.13	0.09	0.180	
Social Support				0.03	0.13	0.826				-1.72	0.71	0.019				0.27	0.09	0.004	

Ref= reference group

Discussion

This study utilized varied measures, including general health, depressive symptomatology, and quality of life, to investigate the health and wellbeing of lesbians, bisexual women, and sexual diverse women in NZ. A secondary aim of the study was to investigate whether there were any differences in health and wellbeing as a function of sexual identity (i.e., lesbian vs. bisexual vs. sexual diverse).

Both sexual identity and education level were found to be significant associations of general health. Across the sample, a higher level of education (i.e., some college/university level or above) was associated with better general health. This is consistent with previous research around the social determinants of health in NZ (Hogarth & Rapata-Hanning, 2023). Similarly, sexual identity was associated with general health, with those who identified as sexual diverse showing poorer general health than those identifying as lesbian. This finding is consistent with other NZ studies (e.g., Greaves et al., 2019) and perhaps indicates the greater levels of social inclusion afforded those who are monosexual (i.e., lesbian) in NZ society. A possible explanation for this is that lesbians are more readily accepted as ‘just like’ heterosexuals except in sex of partner whereas plurisexual identities (e.g., bisexual; pansexual) do not so easily fit this model. This is also compounded by the fact that Māori and ethnic minority persons more often adopt pansexual identities (see Greaves et al., 2019). While our sample size of Māori women is relatively small, our descriptive findings found that a greater proportion of Māori women in our sample reported being bisexual compared to lesbian or sexual diverse. In national health statistics Māori also experience poorer health outcomes across many indicators (Hogarth & Rapata-Hanning, 2023). In our descriptive analyses, we found that Māori women in the sample scored higher on depressive symptomatology compared to women in the other two ethnicity groups (NZ European/Pākehā) but due to small sample size we could not test if these findings are significant. Additional research with a larger sample size is needed to more fully capture and examine the experiences of Māori women, particularly given that individuals identifying as sexually diverse are often underreported from ethnic minority communities. In future research it will also be important to investigate how the intersections of racial and sexual identities are associated with differing patterns in health and well-being.

In contrast, no significant differences in depressive symptomatology and quality of life were found based on sexual identity. However, both social support and community engagement were found to be associated with depressive symptomatology. Those who had better support networks and/or were engaged with an LGBTQ+ community were

less likely to experience depressive symptomatology. Social support was also found to be a significant predictor of quality of life. These findings are consistent with international studies (e.g., Fredriksen-Goldsen et al., 2013; Jaspal et al., 2023; Krueger & Upchurch, 2022) suggesting that social support and community connection are important protective factors in the mental health and wellbeing of sexual minorities. While historically there were more opportunities for sexual minority women to connect as a community, social change and the gentrification of spaces previously used for such activities, have seen the demise of many women-centred communities (Betts, 2021; Dickson et al., 2023). In addition, the dominance of other groups in the LGBTIQ+ community often mean that sexual minority women may feel more marginalized. Interestingly, the older participants in this study were significantly more likely to report a higher quality of life than those younger. Although this finding may seem counter intuitive given the potential for social isolation, those older may have acquired resilience over their life course and be more settled and content with their lives. For example, the lesbians in the study were found to be both older and report better health than the other sexual minority groups in this study.

Policy Implications

Collectively, these findings indicate some important health disparities that have implications for policy. First, given that those who identified as sexual diverse (e.g., pan-sexual, takatāpui, queer) had significantly poorer general health than those identifying as lesbian -it is important that social policy, particularly that relating to health and wellbeing, explicitly considers the wellbeing of sexual minority women, including sexual diverse women. While sexual minorities generally are seldom given consideration in policy, the intersection between marginalisation on grounds of gender or sex (e.g., as women) and that on grounds of sexual minority status results in inequities that are not experienced by sexual minority men nor by heterosexual people. It is therefore imperative that social policy *actively* recognises and includes sexual minority women. While language that is generic (e.g., “all women”, “all New Zealanders”) may be intended as inclusive, for marginalised groups it often acts as exclusionary (e.g., see Ellis, 2025). Second, in this study younger sexual minority women (across identity groups) had a poorer quality of life than older sexual minority women. As this is contrary to the prevailing notion that older women generally experience a reduced quality of life, the intersection of age, gender or sex, and sexual orientation may have a greater impact among younger sexual minority women. There is a need for greater consideration in social policy and interventions about how to ensure that targeted support is

available for younger lesbians, bisexual and sexual diverse women that orient to the specific needs of this group. It is also important that the potential resilience of older sexual minority women be more fully recognized and utilized as a resource in these communities. Overall, ensuring that sexual minorities, including sexual minority women, are included as a “priority population” in social policy around health and longevity is important for promoting health equity.

Limitations of the Study

This study highlights some important findings relating to the wellbeing of lesbian, bisexual, and sexual diverse people but there are some limitations of the study that warrant consideration. Given that recruitment was undertaken online via community agencies, social media platforms, and the use of a recruitment company, it is probable that some otherwise eligible lesbians, bisexual women, and sexual diverse people were not included. In particular, the absence of direct recruiting through Māori organisations (e.g., Hauora providers) means that Māori women were less likely to be represented within this survey. The lack of respondents identifying as takatāpui is an indicator of lower participation rates among this group. The small sample size of subgroups, such as Māori women does not allow us to test for significant differences or run complex analyses including these important subgroups. Future research efforts will want to partner with underrepresented, communities in research, such as with Māori organisations to better understand the needs of women in this populations. Similarly, older women and those from low socio-economic groups are less likely to be actively engaged with social media and online networks. This passive method of recruitment may have meant that women from these groups did not see the recruitment advertisements, and/or may have been less willing or able to engage with an online survey. A demographic bias is also likely to be present in relation to location. The reliance on community agencies means that participants were more likely to be based in larger urban areas. Given the geographically dispersed nature of the NZ population and the paucity of LGBTQ+ organisations in regional locations, those residing outside of our major cities are likely to be underrepresented.

Conclusion

Given the limited amount of NZ research on wellbeing in LGBTQ+ people – particularly lesbians, bisexual women, and sexually diverse women – this descriptive study provides some useful findings and insights. In particular, this study highlights the way in which sexual minority women with plurisexual identities have poorer general health than

their monosexual counterparts; that community engagement and social support are likely important factors in the prevention of depressive symptomatology; and that good social support is a key factor in ensuring a good quality of life. As highlighted, these findings have implications for social policy. In particular, they underscore the need to consider sexual minorities – and sexual minority women in particular – in the development of social policy to ensure equity in health and wellbeing.

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Data Availability The data for this study is not publicly available given project agreements and guidelines.

Code Availability Not applicable.

Declarations

Ethics Approval The Global Pride Project of which this study was a part was approved by the University of Washington Human Subjects Institutional Review Board (ID: STUDY00013402). Approval was also sought from the University of Waikato Human Research Ethics Committee (HREC) who endorsed the approval from the University of Washington to enable the collection of data in Aotearoa/New Zealand (HREC[health]2021#55).

Conflicts of interest/competing interests The authors have no conflicts of interest to declare.

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