



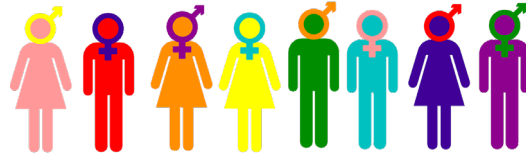
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Minorités sexuelles et disparités de santé  
cardiovasculaire. La cohorte CONSTANCES

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# Cardiovascular health in Sexual minorities



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## Disclosure/COI statement

Funders had no role in study conceptualization, data analyses, manuscript drafting, or publishing choices.

# Previous data on CVD risk disparities

Home » American Journal of Public Health (AJPH) » October 2013

## A Population-Based Study of Cardiovascular Disease Risk in Sexual-Minority Women

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AJPH RESEARCH

## A Systematic Review of Cardiovascular Disease in Sexual Minorities

Billy A. Caceres, MSN, RN-BC, Abraham Brody, RN, PhD, Rachel E. Luscombe, BSN, Jillian E. Primiano, BSN, Peter Marusca, BSN, Edward M. Sitts, BSN, and Deborah Chyun, RN, PhD

Circulation

## AHA SCIENTIFIC STATEMENT

### Assessing and Addressing Cardiovascular Health in LGBTQ Adults

A Scientific Statement From the American Heart Association

*Endorsed by the American Academy of Physician Assistants*

*The American Medical Association affirms the educational benefit of this document.*

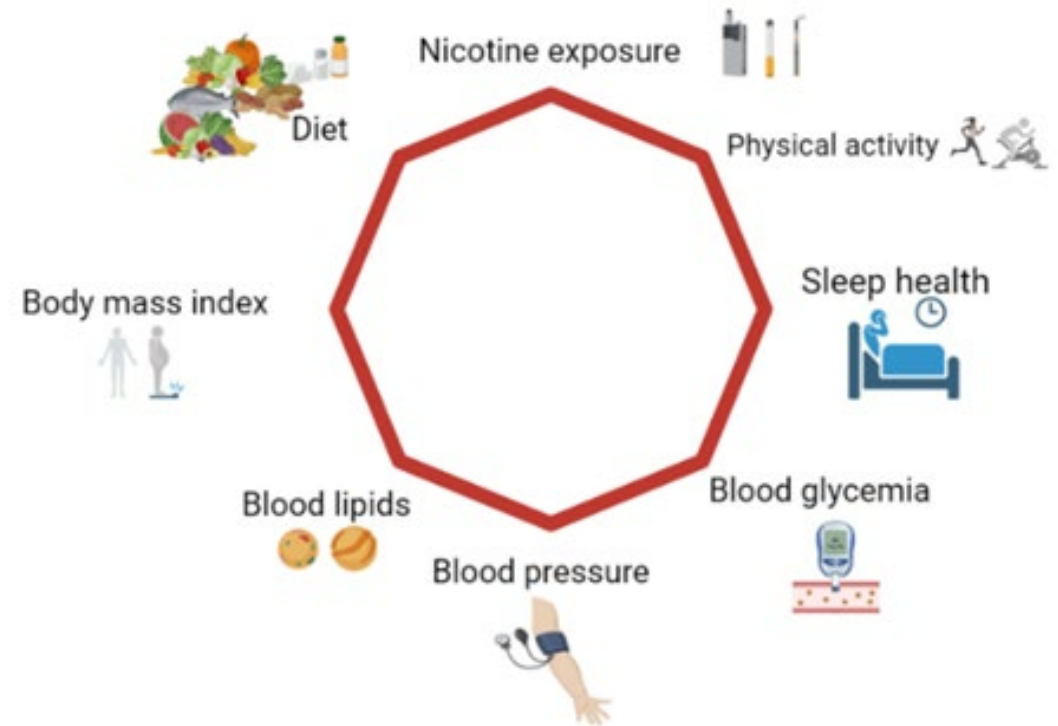
# LE8 score measurement

The score included 8 components measuring

- 1) **Diet**
- 2) **Physical activity**
- 3) **Nicotine exposure**
- 4) **Body mass index (BMI)**
- 5) **Sleep health**
- 6) **Blood pressure**
- 7) **Blood lipids**
- 8) **Blood glycemia**

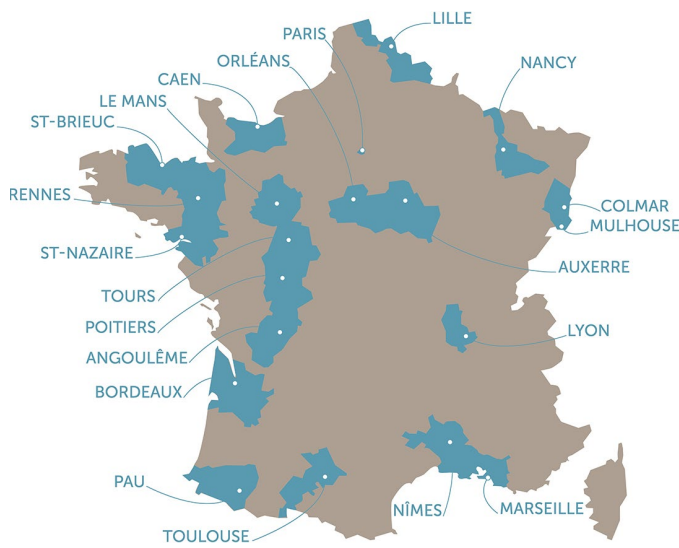
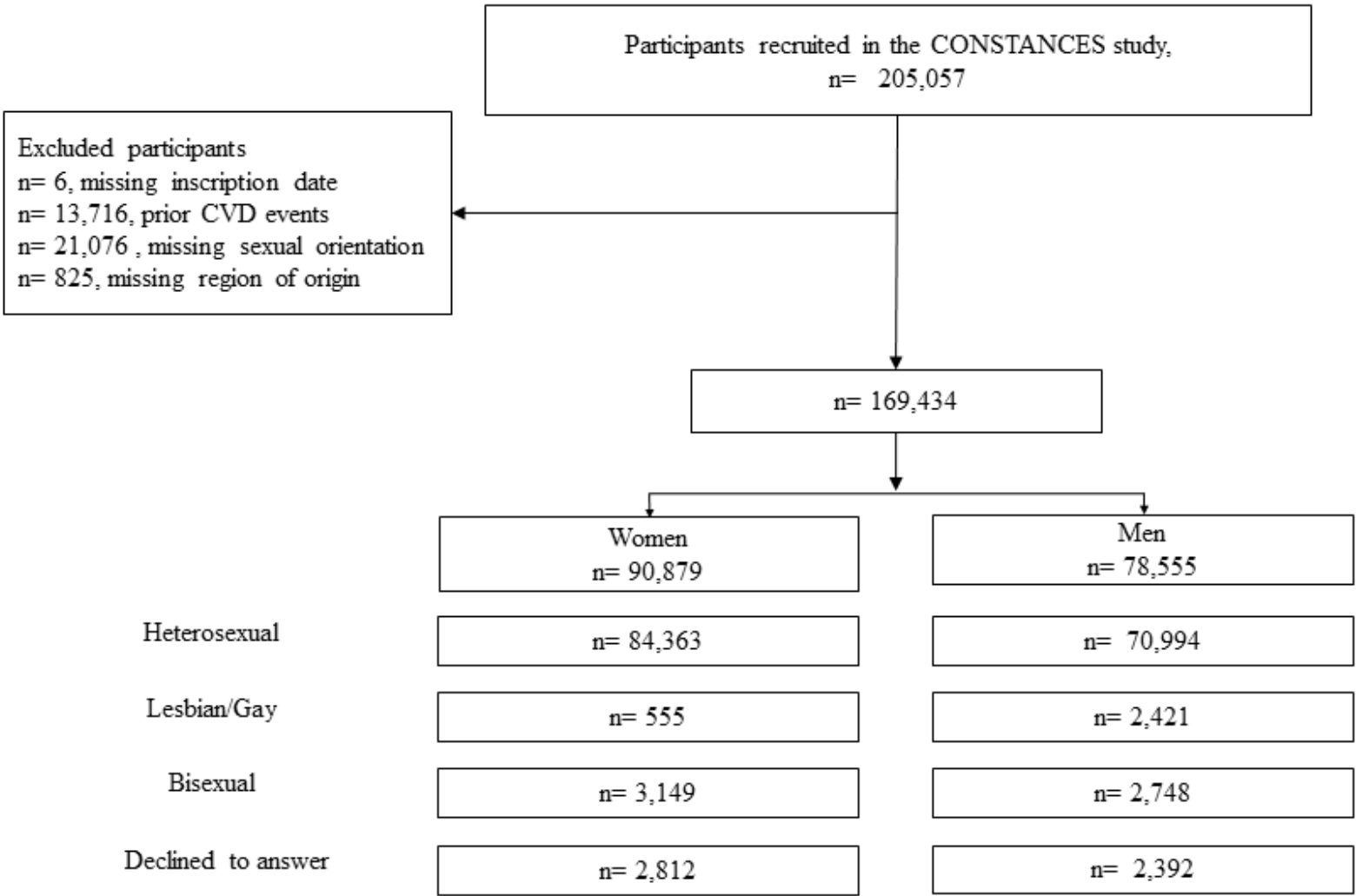
The score for each of the eight component metrics ranges from **0 to 100**. The overall LE8 was the average of all component scores, ranging from 0 to 100. The LE8 score was categorized as **low** (0-49), **moderate** (50-79), or **high** (80-100).

## American Heart Association Life's Essential 8 metrics



# Study sample

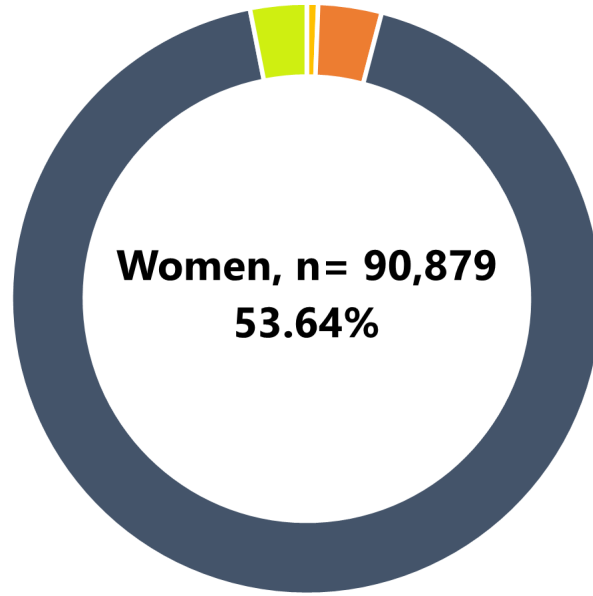
## 24 preventive health centers in 21 French regions



# Findings



n= 169,434



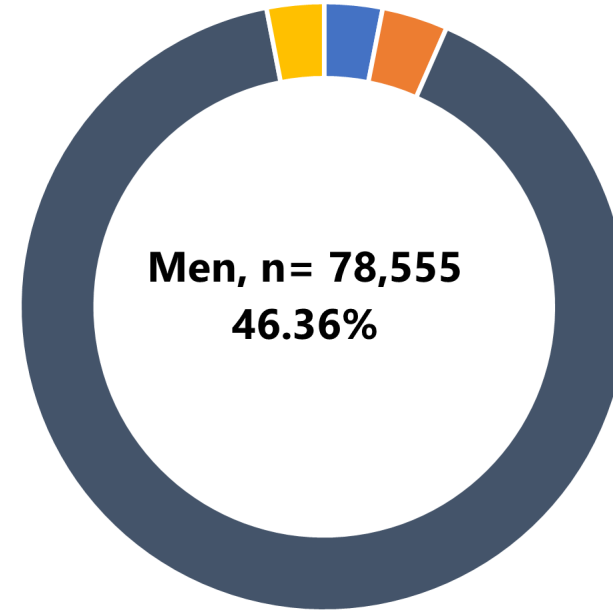
**Women, n= 90,879**  
**53.64%**

■ Lesbian women, n= 555 (0.61%)

■ Bisexual women, n= 3,149 (3.47%)

■ Heterosexual women, n= 84,363 (92.83%)

■ Declined, n= 2,812 (3.09%)



**Men, n= 78,555**  
**46.36%**

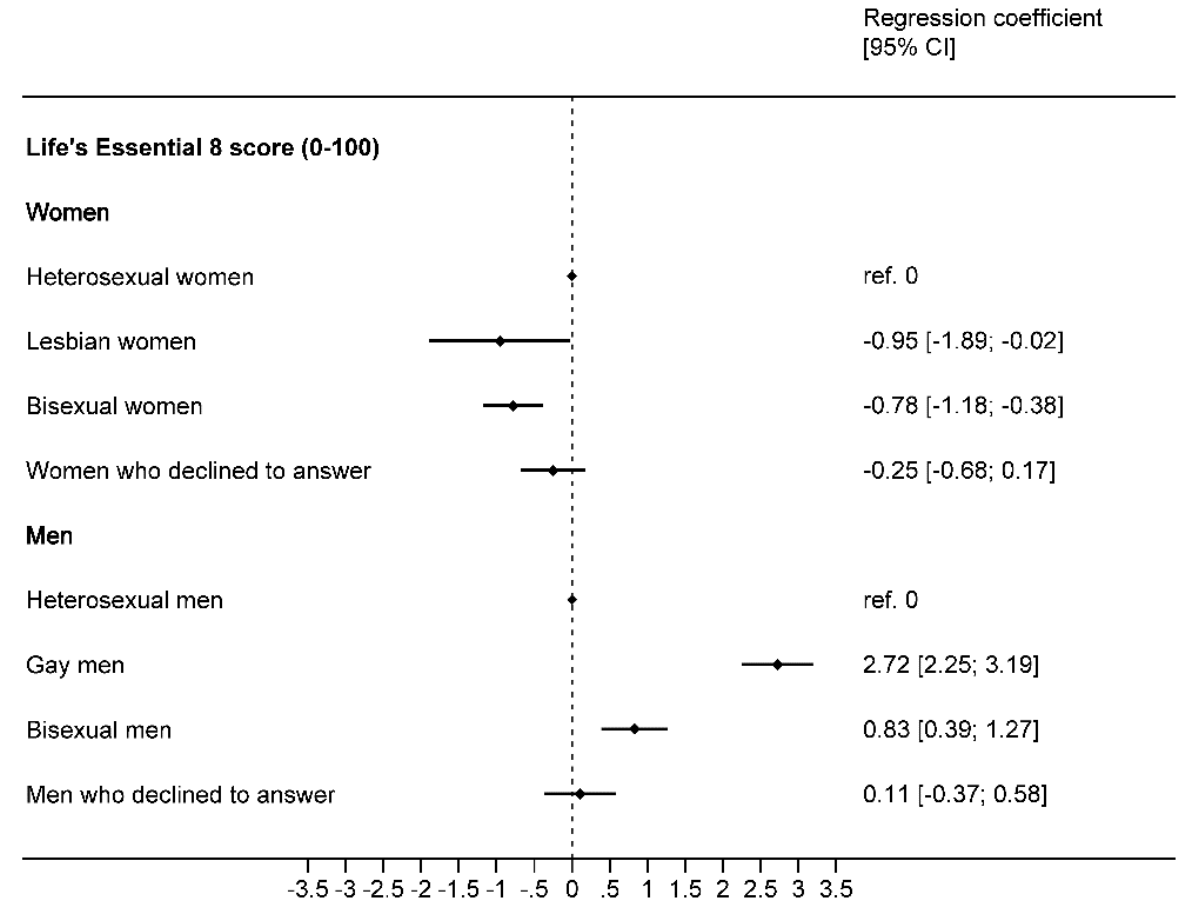
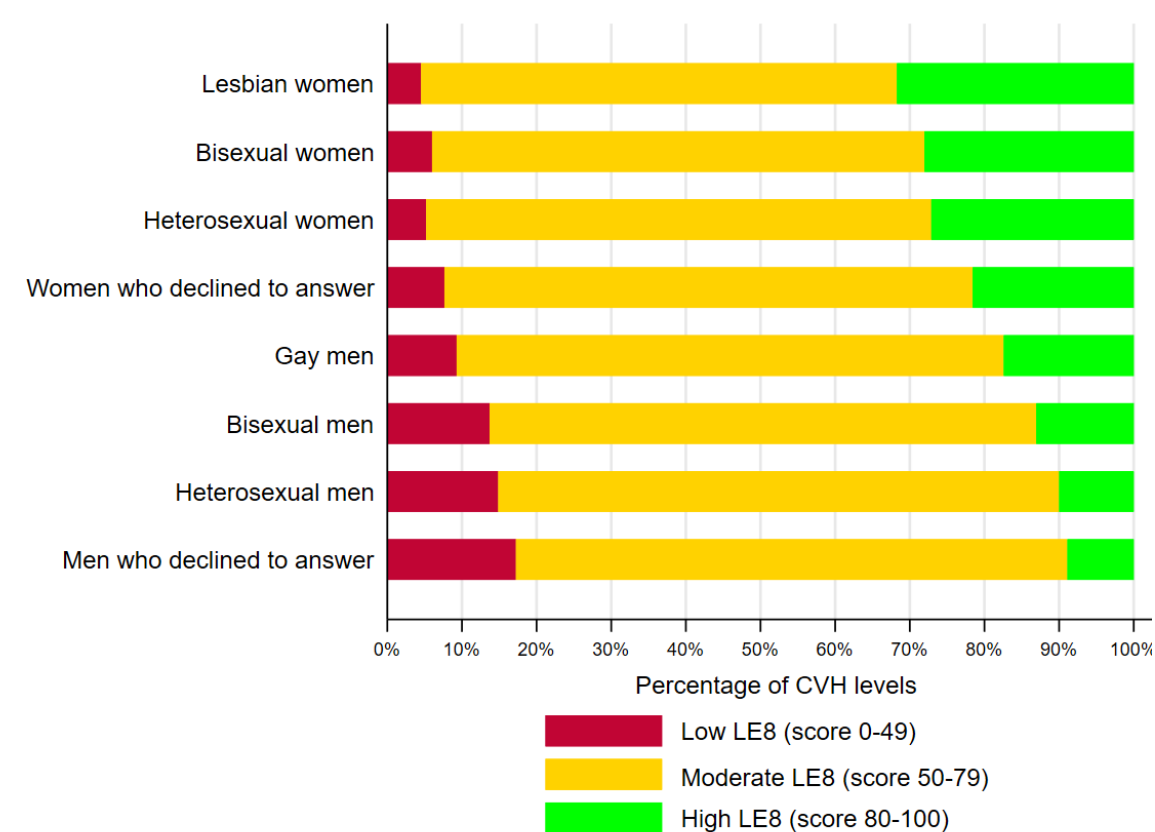
■ Gay men, n= 2,421 (3.08%)

■ Bisexual men, n= 2,748 (3.50%)

■ Heterosexual men, n= 70,994 (90.37%)

■ Declined, n= 2,392 (3.05%)

# Sexual minority status and cardiovascular Life's Essential 8 score

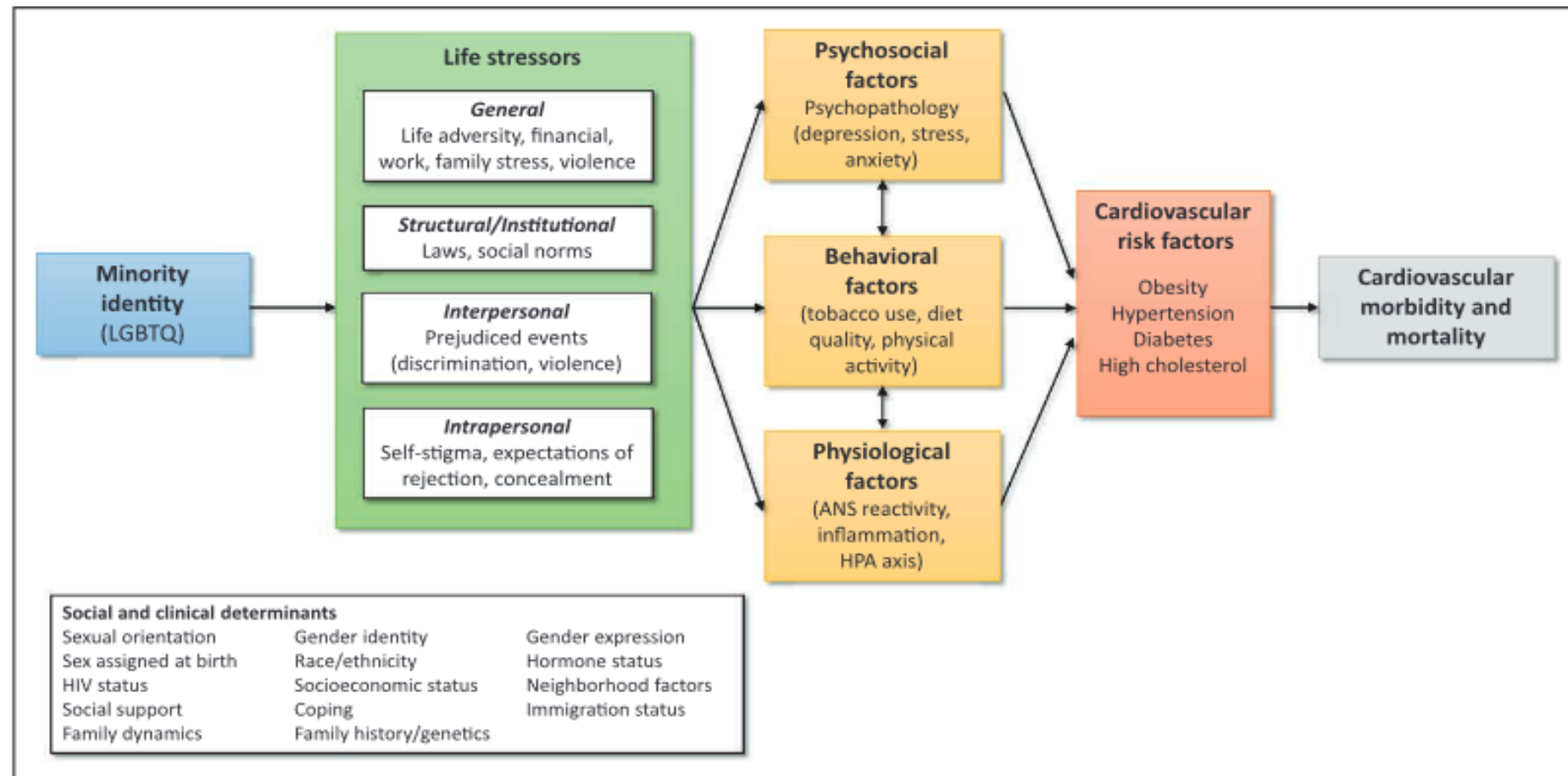


Mixed effects linear regression models estimated regression coefficients ( $\beta$ ). The models were sex-specific and adjusted for chronological age, region of origin, educational attainment, employment status, cohabitation status, depressive symptomatology (CES-D score), alcohol use pattern (AUDIT score), household poverty, residence type, and CVD family history.

# Summary of main findings

- SM women had **lower** life's essential 8 (LE8) scores, while SM men had **higher** LE8 scores compared to their heterosexual counterparts.
- **Component LE8 metrics:**
  - **Bisexual women**, 11.04-points lower nicotine exposure score compared to heterosexual women.
  - **Lesbian women**, 3.02-points lower blood pressure score and 2.45 points lower diet scores compared to heterosexual women.
  - **Bisexual men**, 7.27-points lower nicotine exposure score compared to heterosexual men.





**Figure.** Conceptual model of cardiovascular health in lesbian, gay, bisexual, transgender, and queer or questioning (LGBTQ) adults.









Meyer IH. Prejudice, Social Stress, and Mental Health in Lesbian, Gay, and Bisexual Populations: Conceptual Issues and Research Evidence. *Psychol Bull* 2003;129:674–697.s

Caceres BA, Streed CG, Corliss HL, Lloyd-Jones DM, Matthews PA, Mukherjee M, Poteat T, Rosendale N, Ross LM.

Assessing and Addressing Cardiovascular Health in LGBTQ Adults: A Scientific Statement From the American Heart Association. *Circulation*. 2020;142:e321–e332.

ORIGINAL RESEARCH

# Sexual Minority Status Disparities in Life's Essential 8 and Life's Simple 7 Cardiovascular Health Scores: A French Nationwide Population-Based Study

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**BACKGROUND:** A higher burden of cardiovascular disease risk factors has been reported in sexual minority populations. Primordial prevention may therefore be a relevant preventative strategy. The study's objectives are to estimate the associations of Life's Essential 8 (LE8) and Life's Simple 7 (LS7) cardiovascular health scores with sexual minority status.

**METHODS AND RESULTS:** The CONSTANCES is a nationwide French epidemiological cohort study that recruited randomly selected participants older than 18 years in 21 cities. Sexual minority status was based on self-reported lifetime sexual behavior and categorized as lesbian, gay, bisexual, or heterosexual. The LE8 score includes nicotine exposure, diet, physical activity, body mass index, sleep health, blood glucose, blood pressure, and blood lipids. The previous LS7 score included 7 metrics without sleep health. The study included 169 434 cardiovascular disease-free adults (53.64% women; mean age, 45.99 years). Among 90 879 women, 555 were lesbian, 3149 were bisexual, and 84 363 were heterosexual. Among 78 555 men, 2421 were gay, 2748 were bisexual, and 70 994 were heterosexual. Overall, 2812 women and 2392 men declined to answer. In multivariable mixed effects linear regression models, lesbian ( $\beta = -0.95$  [95% CI,  $-1.89$  to  $-0.02$ ]) and bisexual ( $\beta = -0.78$  [95% CI,  $-1.18$  to  $-0.38$ ]) women had a lower LE8 cardiovascular health score compared with heterosexual women. Conversely, gay ( $\beta = 2.72$  [95% CI,  $2.25$ – $3.19$ ]) and bisexual ( $\beta = 0.83$  [95% CI,  $0.39$ – $1.27$ ]) men had a higher LE8 cardiovascular health score compared with heterosexual men. The findings were consistent, although of smaller magnitudes for the LS7 score.

**CONCLUSIONS:** Cardiovascular health disparities exist in sexual minority adults, particularly lesbian and bisexual women, who may represent a priority population for primordial cardiovascular disease prevention.

**Key Words:** cardiovascular diseases ■ preventive medicine ■ rural population ■ sexual and gender minorities ■ women's health

# Thanks to the all my mentors and professors

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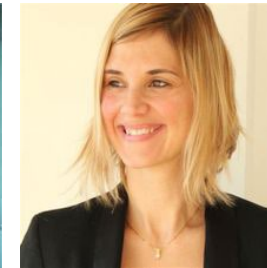
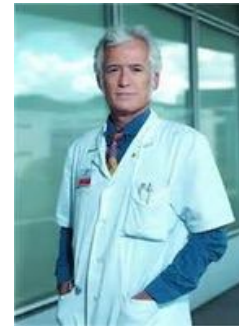
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