Five-year longitudinal sociodemographic and lifestyle trajectories among Mexican young women with breast cancer in the Joven & Fuerte cohort

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Background

Breast cancer (BC) and its treatment can significantly disrupt employment, reproductive, and health behaviors, particularly in young women, with lasting implications for quality of life. However, longitudinal data on these topics in Latin American populations remain scarce.

This study characterizes 5-year sociodemographic and lifestyle trajectories among Mexican young women with BC (YWBC).

Methods

Females aged ≤40 years diagnosed with stage I–III BC from 2015 – 2020 were enrolled in the Joven & Fuerte prospective multicenter cohort.

Generalized estimating equations and multinomial logistic regression were used to assess sociodemographic and lifestyle variables:

- occupational status
- Income
- relationship status
- fertility preferences
- exercise, alcohol use, smoking, and spirituality

Risk ratios (RR), relative risk ratios (RRR), and 95% confidence intervals (CI) were calculated relative to baseline.

Patient-reported and medical record data were collected at diagnosis, 6 months, 1 year, 2–3 years, and 4–5 years post-diagnosis. Each analysis was based on the available data at each timepoint.

Results

Occupational status and income

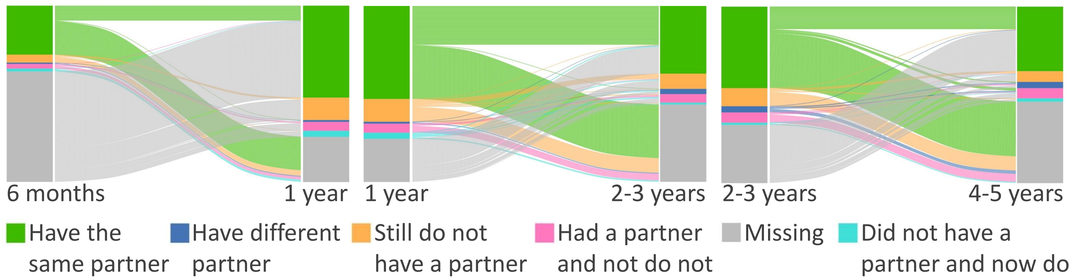
Among 526 participants (median age: 36 years; IQR: 32–38), 53% had education up to high school.

At diagnosis, 40% were employed full- or part-time. Employment dropped at 6 months (RR=0.46; 95%CI: 0.41–0.51) and 1 year (RR=0.54; 95%CI: 0.49–0.60), both p<0.001. Occupational changes, reported by 70% at diagnosis, increased at 2–3 years (RR=1.15; 95%CI: 1.05-1.26; p=0.003) and 4–5 years (RR=1.23; 95% CI: 1.12-1.34; p<0.001).

Income reductions affected 67% at diagnosis and persisted, though likelihood declined at 4–5 years (RR=0.74; 95% CI: 0.62–0.89; p=0.001), suggesting partial financial recovery.

Relationship status

78% had a partner at diagnosis; 75% had the same partner at 6 months, and 68% at 4–5 years. Compared to this group, being with a different partner at 1 year (RRR=0.24; 95%CI: 0.10–0.56; p<0.001) or starting a new relationship at 2–3 years after being single (RRR=0.31; 95% CI: 0.14–0.72; p=0.006) was less likely.



Fertility preferences

39% desired biological children at diagnosis vs. 20% at 4–5 years (RR=0.40; 95%CI: 0.17-0.95; p=0.038). Fewer than 10 live births occurred, and most patients (95–99%) reported no attempts to conceive, with no significant change over time.

Lifestyle behaviors

Physical inactivity dropped from 57% at diagnosis to 44% at 4–5 years. At follow-up, participants were more likely to engage in <150 min/week (RRR=1.80; 95%CI: 1.14-2.84; p=0.01) or ≥150 min/week (RRR=1.64; 95%CI: 1.07-2.51; p=0.02).

Alcohol intake declined: 2% consumed >20 drinks/week at diagnosis; nearly none by 4–5 years (p<0.001). Less than 20 drinks/week intake also dropped at 6 months and 1 year (p<0.001).

Smoking (4–7%) and spirituality (87–93%) showed no significant changes over time.

Conclusion

- **Employment and income disruptions were most pronounced** during early post-diagnosis, with only partial recovery over time.
- **Fertility preferences and attempts to conceive declined** during follow-up
- **Relationship status remained largely stable**.
- Encouragingly, **physical activity improved** during survivorship.

These findings highlight the need for survivorship plans that incorporate **financial support and job reintegration** opportunities to help YWBC regain occupational stability

Collectively, these results emphasize the importance of **longitudinal support strategies** that address the social, financial, and reproductive health needs of YWBC

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