



Factors associated with sedentary behavior in community-dwelling breast cancer survivors

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Objective

- Although sedentary behavior is important from a clinical and public health perspective, the factors associated with long sedentary time are not currently established in breast cancer survivors.
- To identify factors associated with sedentary behavior in community-dwelling breast cancer survivors aged ≥ 50 years.

Method

- 205 breast cancer survivors from the Korea National Health and Nutrition Examination Survey
- Complex-sample multivariable-adjusted logistic regression analyses
- ✓ The associations between sociodemographic factors, medical factors, and health-related quality of life and sedentary behavior.

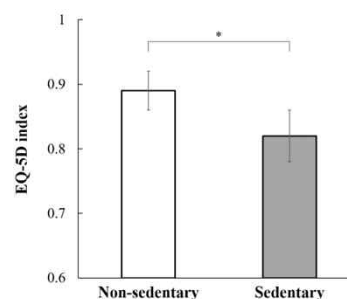
Result

- Among the breast cancer survivors, 48.2% spent long sedentary time (≥ 7 hours/day).
- Insufficient aerobic exercise, diabetes, and unemployed status were independently associated with long sedentary time.
- Non-sedentary participants showed a significantly higher mean European Quality of Life 5-Dimensions (EQ-5D) index than sedentary participants.
- ✓ Among the EQ-5D dimensions, problems in mobility (OR, 3.37; 95% CI, 1.42–7.98) and pain/discomfort (OR, 2.64; 95% CI, 1.24–5.63) dimensions showed positive associations with long sedentary time.

Table 1. Factors associated with long sedentary time

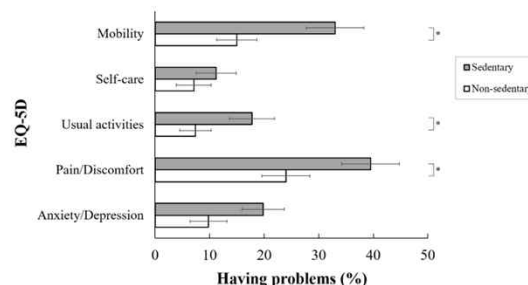
Variables	Unadjusted OR (95% CI)	Adjusted OR (95% CI)
Age (years)		
50–59	Reference	Reference
60–69	1.03 (0.48–2.17)	1.07 (0.42–2.70)
≥ 70	1.23 (0.54–2.76)	0.53 (0.16–1.72)
Obesity		
No	Reference	Reference
Yes	1.73 (0.84–3.53)	1.84 (0.76–4.45)
Residence		
Urban	Reference	Reference
Rural	0.84 (0.41–1.72)	0.71 (0.35–1.44)
Education		
> 9 years	Reference	Reference
≤ 9 years	1.10 (0.57–2.13)	1.01 (0.46–2.21)
Occupation		
Employed	Reference	Reference
Unemployed	1.97 (1.00–3.88)	2.29 (1.05–5.02)
Aerobic exercise		
Sufficient	Reference	Reference
Insufficient	2.23 (1.20–4.15)	2.29 (1.12–4.69)
Resistance exercise		
Sufficient	Reference	Reference
Insufficient	0.92 (0.40–2.09)	0.59 (0.25–1.39)
Years since cancer diagnosis		
< 5 years	Reference	Reference
≥ 5 years	0.53 (0.27–1.06)	0.45 (0.17–1.24)
Currently on cancer treatment		
No	Reference	Reference
Yes	1.56 (0.78–3.12)	0.78 (0.30–2.00)
Comorbidities		
Hypertension	1.19 (0.63–2.24)	0.88 (0.38–2.04)
Diabetes	2.42 (1.07–5.50)	3.37 (1.22–9.33)
Hypercholesterolemia	1.19 (0.57–2.46)	0.98 (0.43–2.28)
Anemia	0.97 (0.34–2.77)	0.99 (0.24–4.04)
Depression	1.00 (0.99–2.92)	0.83 (0.28–2.47)

Fig. 1. Adjusted mean EQ-5D index by sedentary behavior status.



Adjusted for age, obesity, residence, education, occupation, aerobic exercise, resistance exercise, years since cancer diagnosis, currently on cancer treatment, hypertension, diabetes, hypercholesterolemia, anemia, and depression.

Table 2. Prevalence of having problems in each EQ-5D dimension according to sedentary behavior.



Conclusion

- In breast cancer survivors ≥ 50 years, a long sedentary time is associated with insufficient aerobic exercise, diabetes, unemployed status, and impaired quality of life.
- Breast cancer survivors with these factors require attention to reduce their sedentary behaviors.