



DISPARITIES IN THE TREATMENT AND MORTALITY RISK OF ENDOMETRIAL CANCER AMONG WOMEN WITH DISABILITIES: A NATIONAL DATABASE STUDY

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INTRODUCTION

- Endometrial cancer incidents have increased worldwide.
- In Korea, if endometrial cancer is detected early when it is confined to the uterus, the 5-year survival rate is over 80–90%.

PURPOSE

- This nationwide study investigated disparities in endometrial cancer care and outcomes between women with and without disabilities in Korea.

METHODS

Study Setting and Data Source

- *Korean National Health Service (KNHS)* : KNHS provides public health insurance to all Koreans.
- *Disability Registration System in the Republic of Korea (KNDRS)* : KNDRS was established in 1989 to provide social welfare benefits based on predefined criteria for disability registration and objective medical assessment using a disability grading system, which are determined by the type and severity of disability.
- *Cancer Registration System in the Republic of Korea (KCCR)* : KCCR began as a hospital-based nationwide cancer registry that has been active since 1980. The data cover over 90% of new cancer cases in Korea.

Study Subjects

- We linked the multi-database with the national disability registration data.
- All subjects diagnosed with endometrial cancer (ICD code C54.1) (N=4,432)
- The study sample included 726 patients with disabilities and 2,630 patients without disabilities at the endometrial cancer diagnosis stage

RESULTS

Treatment of endometrial cancer in patients with Disabilities

- Endometrial cancer patients with disabilities were less likely to undergo recommended surgery (adjusted odds ratio (aOR) 0.85, 95% confidence interval (CI) 0.65 – 1.10) or chemotherapy (aOR 0.76, 95% CI 0.61 – 0.95) versus non-disabled patients.

Table 1. Mortality Risk for Patients with Endometrial Cancer by Disability Grade and Type

Characteristics	All	No. of death	Rate per 1000	Crude HR (95% CI)	Adjusted HR (95% CI) *
By Disability					
Without disabilities	2,630	483	24.6	Ref	Ref
With disability	726	167	34.6	1.36 (1.14 - 1.62)	1.44 (1.20 - 1.73)
By disability grades					
Severe (Grade 1-3)	334	72	32.0	1.26 (0.98 - 1.61)	1.32 (1.01 - 1.73)
Mild (Grade 4-6)	392	95	36.9	1.44 (1.16 - 1.80)	1.53 (1.22 - 1.92)
By disability types					
Physical/brain					
Severe (Grade 1-3)	138	39	43.5	1.72 (1.24 - 2.39)	1.24 (0.88 - 1.74)
Mild (Grade 4-6)	312	77	37.4	1.47 (1.15 - 1.87)	1.54 (1.21 - 1.96)
Communication					
Severe (Grade 1-3)	50	6	16.2	0.66 (0.29 - 1.47)	0.81 (0.36 - 1.83)
Mild (Grade 4-6)	66	15	37.0	1.38 (0.83 - 2.31)	1.50 (0.89 - 2.51)
Mental					
Severe (Grade 1-3)	102	16	23.3	0.90 (0.55 - 1.48)	1.65 (0.95 - 2.84)
Mild (Grade 4-6)	1	0	0.0	-	-
Cardiopulmonary					
Severe (Grade 1-3)	12	3	37.5	1.46 (0.47 - 4.53)	1.16 (0.37 - 3.65)
Mild (Grade 4-6)	1	0	0.0	-	-
Others					
Severe (Grade 1-3)	32	8	36.5	1.42 (0.71 - 2.86)	3.82 (1.84 - 7.94)
Mild (Grade 4-6)	12	3	32.6	1.39 (0.45 - 4.33)	2.00 (0.63 - 6.30)

*Adjusted for age, CCI, income, place of residence, cancer stage, surgery, chemotherapy, radiotherapy. HR = hazard ratio; CI = confidence interval; Ref = reference.

Mortality risk in endometrial cancer patients with disabilities

- Adjusting for demographic and clinical factors, endometrial cancer patients with disabilities had a 44% higher overall mortality risk compared with non-disabled patients (adjusted hazard ratio (aHR) 1.44, 95% CI 1.20-1.73) (Table 1).

CONCLUSION

- This national study revealed that disabled Korean women with endometrial cancer received inequitable cancer care, which resulted in poor survival outcomes.
- Patients with severe disabilities are less likely to undergo surgery/chemotherapy and, subsequently face a 44% higher mortality risk.

LIMITATIONS

- It was not possible to confirm whether the patients received cancer treatments according to clinical guidelines or to examine the reasons some patients did not undergo the recommended therapies.

IMPLICATIONS

- A multidimensional approach integrating targeted patient support, educational interventions for providers, and health system policy improvements is essential to equitably improve access to cancer care and outcomes among women with disabilities.