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Introduction

- Emerging data suggests that cancer survivors are at high risk of developing diabetes mellitus, hyperlipidemia and cardiovascular diseases after cancer diagnosis.^{1,2}
- However, little is known whether cancer survivors residing in Asian countries are at risk of developing these conditions after cancer treatment.

Objectives

- To describe the incidence of diabetes mellitus, cardiovascular diseases and hyperlipidemia after cancer treatment.
- To describe the utilization of medications to manage these newly diagnosed chronic diseases.

Methods

- Study design:** Secondary analysis of a prospective cohort study.
- Study site:** National Cancer Centre Singapore, KK Women's and Children's Hospital.
- Study population:** Early-stage breast cancer patients diagnosed between 2011 and 2013.
- Study procedure:** Clinical and medication data were followed up every 6 months for 4.5 years post diagnosis.

Results

- Among 168 patients, 155 cancer survivors were analyzed [lost to follow-up (n=5) and dead (n=8)] (Table 1).
- Mean (\pm SD) age at diagnosis was 51.0 (\pm 8.9) years old, with 81.9% Chinese, 9.7% Malays and 5.2% Indians. Eighty patients (51.6%) were postmenopausal.

Table 1. Demographic and clinical information (N=155)

Demographic and clinical information		N (%)
Cancer stage	I	35 (22.6)
	II	80 (51.6)
	III	40 (25.8)
Chemotherapy regimen	Anthracycline-based	103 (66.5)
	Taxane-based	52 (33.5)
Body mass index (kg/m ²), mean \pm SD		24.8 \pm 4.5

Results

- At the point of cancer diagnosis, the prevalences of diabetes mellitus, hyperlipidemia and cardiovascular disease were 9.0%, 18.7%, and 25.2%, respectively (Figure 1).
- Over the follow-up period, the cumulative incidences of new-onset diabetes mellitus, hyperlipidemia and cardiovascular disease were 6.5%, 7.1%, and 5.2%, respectively.

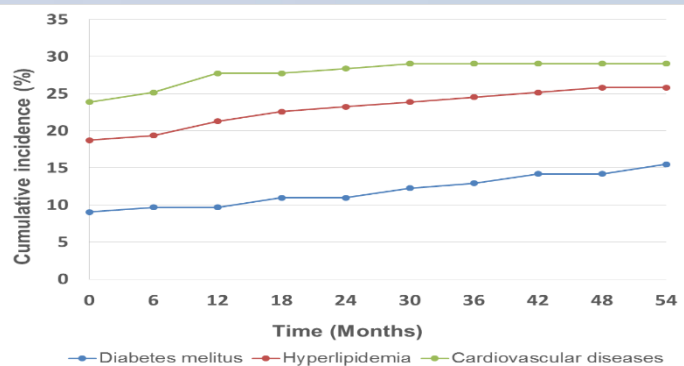


Figure 1. The cumulative incidence of diabetes mellitus, hyperlipidaemia and cardiovascular disease after cancer diagnosis

- Thirty-three (21.3%) patients received medications to manage at least one of the comorbidities aforementioned, with 7.7% (n=12) patients requiring more than 3 medications (Table 2).

Table 2. Total number of medications at 4.5 years (N=155)

Total Number of medications	N (%)			
	Diabetes	Cardio-vascular	Hyper-lipidemia	Any co-morbidity
0	141 (91.0)	129 (83.2)	133 (85.8)	122 (78.7)
1	9 (5.8)	18 (11.6)	19 (12.3)	11 (7.1)
2	5 (3.2)	5 (3.2)	3 (1.9)	10 (6.5)
\geq 3	0 (0.0)	3 (2.0)	0 (0.0)	12 (7.7)

Conclusions

- New-onset of chronic illnesses appeared to be common and prevalent among Asian breast cancer survivors.
- Survivorship care plans for cancer survivors must emphasize preventive and proactive management of these health conditions to improve the holistic life-span health outcomes in cancer survivors.

References

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