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Shift work is risk factor for breast cancer among Taiwanese women

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Background: To assess risk factors for breast cancer among Taiwanese women, we conducted a nested case–control study within a women's health center cohort in a medical center in Taipei city, Taiwan.

Materials and Methods: All women who came to the women's health center for breast cancer screening or for diagnosis were recruited into the study. Cases were diagnosed as primary breast cancer with pathology confirmation, whereas controls were women who were never diagnosed with breast or other cancers. Informed consent was obtained from each study subject and the study approve by the institutional review board (IRB) of the Tri-Service General Hospital. Risk factors were collected by using a structure questionnaire. Conditional logistic regression was used to assess the hazard ratio (HR) with the adjustment of potential confounders (SAS 9.2 v).

Results: A total of 2023 study subjects were recruited in the study, including 408 cancer cases and 1615 controls. After adjusting for potential confounders, we found that age (HR = 9.71, 95%CL=7.34–12.84), BMI (HR = 1.09, 95%CL=1.04–1.15), menarche age (HR = 1.16, 95%CL=1.04–1.29), menopause status (yes vs. no, HR = 2.49, 95%CL= 1.51–4.08), shift work (yes vs. no, HR = 2.54, 95%CL=1.37–4.70) were positively associated with breast cancer.

Conclusion: Among these risk factors, work shift is an occupational exposure. We suggest re-scheduling the timetable for women in workforces with rotating shifts; as well further study on mechanism (e.g. melatonin and other hormone metabolism).

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Parity and age at first childbirth in relation to the risk of different breast cancer subgroups

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The aim of the present study was to examine parity and age at first childbirth, in relation to the risk of specific breast cancer subgroups. A prospective cohort, The Malmö Diet and Cancer Study, including 17,035 women were followed with linkage to Swedish Cancer Registry until December 31, 2004. A total of 622 incident breast cancers were diagnosed during follow-up and were evaluated regarding invasiveness, tumour size, axillary lymph node status, Nottingham grade, tumour proliferation (Ki67), HER2, cyclin D1 and p27. The tumours were also examined for WHO type and hormone receptor status. Nulliparity was associated with an overall increased risk of breast cancer, although not statistically significant (the relative risk was 1.39 with a 95% confidence interval of 0.92–2.08). Nulliparity was also associated with large tumours (>20 mm) (1.89: 0.91–3.91), high Ki67 levels (1.95: 0.93–4.10), high cyclin D1 levels (2.15: 0.88–5.27), grade III (2.93: 1.29–6.64) and HER2 positive tumours (3.24: 1.02–10.25). High parity was not statistically significantly associated with any specific breast cancer subgroup. Older age at first childbirth (>30) was associated with a slightly increased risk of breast cancer (1.39: 0.94–2.07). There was a statistically significant association between late first childbirth and lobular type (2.51: 1.01–6.28), grade III tumours (2.67: 1.19–6.02), high levels of cyclin D1 (2.69: 1.18–6.12) and low levels of p27 (2.23: 1.15–4.35). We conclude that nulliparity and late first childbirth are associated with relatively more aggressive breast cancer subgroups.

References

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Measuring quality of the process of care in breast-cancer patients: a French perspective

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Background: The objective of the study is to develop a set of quality indicators (QIs), allowing hospitals comparison, measuring the process of care in non-inflammatory non-metastatic invasive breast cancer patients.

Methods: The COMPAQH project has designed a set of QIs, derived from clinical practice guidelines, in partnership with national agencies, hospitals federations and professional bodies (SFSPM, CNGOF, INCa, FNCLCC, HAS)[a].

Eight QIs evaluating delays as well as different steps of the process of care have been defined (table). QIs are evaluated through 3 criteria: feasibility of data collection, metrological quality (reliability, validity) and relevance (discriminative power). For each indicator, data collection is based on a retrospective analysis of 80 randomly selected medical records in each hospital.

QIs are measured in a panel of 70 volunteer hospitals. As data collection is in progress, preliminary results presented here concern 41 hospitals.

Results: QI1 is the delay between patient call for a surgeon consultation and the date of consultation. However, patients' calls are scarcely recorded (<50% of hospitals). This QI cannot therefore allow hospitals comparison: median and extreme values are delivered to hospitals only.

	Measures used: Proportion of patients . . .	%, mean (min, max)
QI2	with a delay from first surgeon consultation to first surgery ⩽21 days	58 (17, 90)
QI3	with a delay from MRM (multidisciplinary review meeting) to the post-surgery consultation presenting its conclusions ⩽14 days	83 (26, 100)
QI4	with a delay from first surgery to first adjuvant treatment ⩽30 days if chemotherapy or ⩽56 days if radiotherapy	50 (17, 92)
QI5.1	whose case is submitted to a well organized MRM	50 (0, 100)
QI5.2	with a delay from first surgery to MRM ⩽14 days	65 (1, 99)
QI6	who receive a complete information before surgery	13 (0, 100)
QI7	where mandatory prognostic factors are specified in medical records	71 (4, 99)

Conclusions: Taking in charge patients without delay has consequences on 5 years survival. The working group decided therefore to maintain the collection of QI1. It should encourage hospitals to improve their information systems.

Large variations in practice are observed on the 7 other QIs. Rather low score values should encourage hospitals to promote quality improvement policies. The very low value of QI6 may be due to the fact that recommendations by health authorities on this topic were made recently.

If these results are confirmed in the whole set of 70 hospitals and after discussion with the working group, a national implementation in every hospital managing breast-cancer patients should occur in 2010.

[a]SFSPM, French Senologic Society; CNGOF, French National College of Gynaecologists and Obstetricians; INCa, French National Cancer Institute; FNCLCC, French National Federation of Cancer; HAS, French National Authority for Health.

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A multidisciplinary approach to menopausal symptom management after breast cancer

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Background: Nearly 2.5 million US women are breast cancer (BC) survivors [1]. Breast cancer treatment causes menopausal symptoms in around 60% of patients. While ovarian suppression, endocrine treatments and cessation of HRT all commonly cause menopausal symptoms, few studies have evaluated the severity of symptoms or their impact on quality of life and there is limited information for health care providers or patients about management strategies. While established treatments for menopausal symptoms (estrogen/progestin and tibolone) may increase the risk of breast cancer recurrence [2], relatively little is known about the safety of these treatments after other hormone-dependent cancers [3]. Effective non-hormonal treatments are increasingly available, but there is often poor coordination between health providers in advising and managing menopause after cancer. The multidisciplinary (MD) model of cancer care is now well established and offers many advantages to consumers and health care providers [4−9].

Materials and Methods: A public MD clinic for menopausal symptoms after cancer (MSAC) has been established in Western Australia where