The effectiveness of an education programme for breast cancer women taking tamoxifen

Mak WC (1), Leung WYC (1), NG MC M (1), Lee LH (1), Lo KL (1), Lo CY (1), Wong, NM (1), Ng KS (1), Cheung WC (1)

Affiliation: (1) Clinical Oncology Department, Queen Elizabeth Hospital

Keywords:
Tamoxifen
Breast cancer
Education programme

Introduction
Tamoxifen has been the mainstream hormonal therapy for ER-positive breast cancer. In order to explore whether patients had information needs on hormonal therapy and to investigate patients' drug adherence to hormonal therapy, a preliminary survey was carried out in February 2014 in clinical oncology department of QEH. 36 patients completed the survey. Results illustrated that the compliance rate of hormonal therapy was far less than optimal (55.4%) and majority of patients (61.1%) voiced out that they need more relevant information. An education programme was therefore specifically designed for breast cancer patients who were newly receiving tamoxifen and this pilot programme was carried out from mid-April to mid-July.

Objectives
Improve breast cancer patients' knowledge on tamoxifen Enhance patients’ adherence to tamoxifen Enhance patients’ knowledge and behaviour in managing tamoxifen induced side-effects Increase patients’ satisfaction Enhance breast cancer patients' health-related QoL

Methodology
Eligible candidates were recruited in the clinical oncology outpatient center at QEH. Women who were diagnosed with ER-positive breast cancer and newly receiving tamoxifen were selected. Participants were then randomly assigned to intervention and control group. Participants in the intervention group received an education programme while the control group did not. Intervention participants received three individualized face-to-face interviews and a well-designed booklet. The booklet included possible side-effects of tamoxifen, its related management tips and a drug diary. In addition to providing relevant information, nurses’ provided the necessary
psychological support and addressed patients’ enquiry. The effectiveness of the programme was measured by a questionnaire. The questionnaire consisted of four categories which assessed patients’ knowledge (10 MCQs), tamoxifen adherence (MMAS-8), health-related QoL (FACT-B and FACT-ES), and satisfaction. Also, OMAHA system was employed to evaluate patients’ knowledge and behaviors on management of the possible tamoxifen induced side-effects.

**Result**

26 participants were randomly allocated to intervention and control group. Each arm consists of 13 participants, but one control case dropped out. The mean age, education level and menopausal status of the intervention and control group were comparable. For patients’ knowledge on tamoxifen, the mean knowledge test score of the intervention group had a marked improvement when compared with the control group (9.15/10 vs 5.75/10). Moreover, according to the MMAS-8 classifications of medication adherence, 92.31% of the intervention participants were classified as high adherent on tamoxifen. In contrast, there was only 58.33% in the control group.

Looking into the FACT-ES, both the control and intervention participants rated hot flashes, night sweats and low sexual desire as the most distressing symptoms induced by tamoxifen. Patients in the intervention group rated these three symptoms much higher than they did in the first consultation (higher scores represent a better QoL). On the contrary, patients in the control group rated these three symptoms slightly lower than their baseline results. These results pointed out that the education programme could improve tamoxifen induced side-effects by providing patients with the necessary knowledge and self-management skills. Overall, nurses found that intervention participants had knowledge improvement and behavioral changes on the tamoxifen induced side-effects. At the end of the programme, participants in the intervention group were required to fill in a satisfaction survey. Majority of intervention participants (92%) reported that they felt satisfied and very satisfied about this programme.