Dietary intervention and reducing the side effects of chemotherapy among women with breast cancer

Objective: Gastrointestinal (GI) side effects caused by chemotherapy in women with breast cancer are common but poorly understood which might be controlled by nutritional intervention; thus, the major aim of this study was to assess the effect of dietary intervention along with nutritional education on reducing these side effects.

Methods: The present study is a single-center, single-controlled and randomized trial, a total of 150 patients with breast cancer undergoing chemotherapy were randomly assigned into intervention groups to receive dietary intervention and nutritional education (n=73) or control group (n=67), after their three sessions of chemotherapy for 10 weeks. The primary endpoint was the GI symptoms after each session of chemotherapy that were measured by a designed questionnaire based on ROME III questionnaire.

Results: The severity of GI side effects in the dietary intervention along with nutritional education was decreased significantly in the third session of chemotherapy compared to the first session, which included reflux disorder (P=0.05), anorexia (P<0.001), nausea (P=0.002), constipation (P<0.001) and diarrhea (P<0.001); moreover, significant reductions were observed in the severity of GI side effects in the intervention group compared to control group after the third session (P<0.001). After adjusting the analysis for baseline values including age, job, education level, weight and body mass index, significant changes were observed for GI side effects in the intervention group compared to the control group (P<0.001).

Conclusions: This study showed beneficial effects of individualized dietary intervention along with nutritional education on reducing diarrhea, constipation, vomiting and nausea in women with breast cancer during the chemotherapy.

Biography
Mitra Zarrati completed her PhD years from Tehran University of Medical Sciences. She is the Director of Nutrition Sience. Her researches published more than 14 papers in reputed journals and has been serving as an editorial board member of repute.