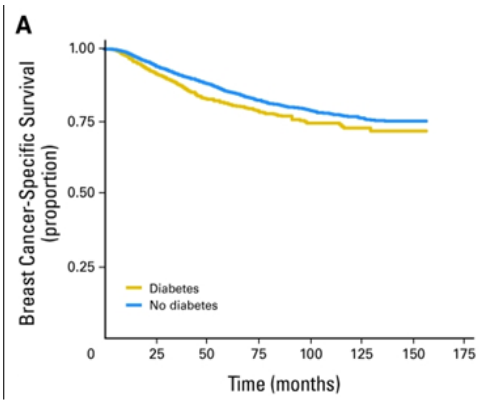
Clinical Challenges in Caring for Patients with Diabetes and Chemotherapy Administration

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Keywords: Chemotherapy, Glycemic control, triple receptor-negative breast cancer,

Currently, about 8%–18% of all cancer patients have preexisting diabetes. Patients with diabetes and cancer receiving chemotherapy have an increased risk for developing glycemic issues (1). The relationship between chemotherapy and glycemic control is not completely understood . There is little data to describe the experience of diabetic patients during chemotherapy. Hyperglycemia in cancer patients has been linked to the risk of developing a nonhematological clinical toxicity while being treated with chemotherapy. Many chemotherapy agents have been linked to the development of hyperglycemia in patients without diabetes. Also, several studies have also demonstrated that patients with diabetes and cancer have a poorer prognosis compared with those without diabetes (2). According to results of a case study literature, it was showed the level of glycemic control at the time an individual begins treatment for cancer appears to contribute to the occurrence of an adverse event, developing an infection and/or being hospitalized during treatment, and the increased risk of having a chemotherapy reduction or stoppage (3). In other observational, hypothesis-generating study, patients who have breast cancer and diabetes are at increased risk of chemotherapy-related toxicities compared with nondiabetic patients who are receiving chemotherapy and have higher all-cause mortality (4). However, some believe that we may use some chemotherapy drugs in the diabetic patients with less adverse effects. For example, in the one cohort studty, data suggest that concurrent use of metformin with adjuvant chemotherapy does not significantly impact survival outcomes in diabetic patients with triple receptor-negative breast cancer **(**TNBC**)**; however, patients who do not take metformin and nondiabetic patients tend to have a higher risk of developing distant metastases (5).



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Biography:

Ahmadreza Baki-Jafarzadeh, RN, BSN, MIN, has more than 23 years of professional experience including critical care nursing, staff development, clinical instruction, diabetes education and oncology nursing. He earned his undergraduate Bachelor of Science in Nursing with High Distinction from the University of Tehran, Iran. He is actively involved in Oncology and research and has served as an RN in different countries over 14 years. He was awarded the 2013 Gerlard Kirsh Humanitarian Award at Princess Margaret Hospital where he has worked for the last ten years. He continues to be active in assisting student nurses at Tehran University of Medical Science and Health Care in Iran.



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Session name/ number:
Category: Oral presentation