ECONOMIC CHALLENGES FACED BY YOUNG ADULT TUNISIAN PATIENTS FOLLOWING BREAST CANCER

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Objectives Young adult Tunisian patients treated for breast cancer are confronting, in addition to disease, its financial impact. We aim to investigate socioeconomic profiles and financial challenges of young adult patients in the Tunisian context.

Methods Patients aged 20 to 40 years treated for breast cancer regardless of stage (n=62) were asked to complete a questionnaire in April 2022. The survey included items about: socioeconomic conditions and future life projects.

Results Mean age was 35 years old [26–40]. Eight patients (12%) were under 30. Thirty-four patients (54%) had high educational level. Thirty-six patients (58%) had job. Twenty-seven patients (43%) lost their jobs because of sick leaves and 19 patients (30%) found difficulties to get job when announcing disease to employers. Twenty-four patients (38%) were economically dependent on their husbands and 12 patients (19%) to their parents. Thirty-six patients (58%) reported financial difficulties. Immigration intention to developed countries was reported by 25 patients (40%) – mostly of better health system and financial support (61.5%).

Conclusions Tunisian young adult patients following breast cancer are facing economic and social difficulties that must be considered on the same level as others sides of health care.

THE EFFECT OF 7-KETOCHOLESTEROL ON BREAST CARCINOMA CELL LINES TREATED WITH TAMOXIFEN IN VITRO

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Objectives Oxysterols are oxidative derivatives of cholesterol that play many roles in human physiology and pathology, including cancer. For example, oxysterols modulate cell proliferation, apoptosis, or migration. This study aimed to analyze the role of important oxysterol, 7-ketocholesterol (7-KC), in response of breast carcinoma cell line models to treatment with tamoxifen.

Methods Two estrogen receptor (ER) positive (MCF-7 and T47D) and one ER-negative (BT-20) breast carcinoma cell lines were employed. Cell lines were co-incubated with tamoxifen and 7-KC at different concentration ratios, and the viability of cells, proliferation, cell cycle, caspase activity, and gene expression changes were evaluated. Next, the ability of 7-KC to stimulate cell migration and invasivity was tested.

Results 7-KC slightly increased the IC_{50} value of tamoxifen in the MCF7 cell line, but decreased it in the BT-20 cell line. No significant difference was observed for T47D cells. In line with these data, caspase 3/7 activity was enhanced by 7-KC in BT-20 cells, but not in any ER-positive cell line. Gene expression analysis showed upregulation of tamoxifen metabolizing genes, e.g. CYP1A1 and CYP1B1 in MCF-7 while downregulation in BT-20 cells. Finally, we found that the presence of 7-KC potentiates cellular migration and invasivity.

Conclusions 7-KC seems to modulate the response of breast carcinoma cells to tamoxifen according to ER status in vitro, making it an interesting candidate for future studies. The study was supported by projects INTER-ACTION no. LTAUSA19032 and AZV no. NU20–09–00174.
E-potser viewing: Cervical cancer

EP039/#692 EVALUATION OF THE FACTORS ASSOCIATED WITH THE DELAY IN INITIATION OF TREATMENT OF ADVANCE STAGE CERVICAL CANCER PATIENTS
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Objectives Background: Cervical cancer ranks 2nd in women cancer and third leading cause of female cancer death in Bangladesh. Delay in initiation of treatment in advanced stage cervical cancer patients is associated with significant morbidity and mortality. It is crucial to overcoming the barrier for initiation of effective treatment in appropriate time. Objective: Assessment of the factors that lead to delay in diagnosis and treatment of advanced stage cervical cancer patients.

Methods This observational cross-sectional study was conducted from November 2019 to October 2020 in the Gynecological Oncology department of National Institute of Cancer Research and Hospital, Dhaka. 138 patients of advanced stage cervical cancer were included in the study.

Results The mean age of the patients was 48.74 (±9.57) years. 30.4% of patients were illiterate and the majority (43.47%) belonged to low middle income family. Illiteracy, low monthly income, residents of rural areas, embarrassment, fear, lack of knowledge regarding cervical cancer, contacting a non-medical person prior to the first medical person, not performing per speculum examination at initial consultation, misdiagnosis, delay in referral to tertiary care centre hospital, long distance of the primary health care facility and tertiary care centre hospital from the residence were predictors of longer delays in treatment initiation (p value <.05).

Conclusions Financial Crisis, lack of education, inappropriate management, lack of availability and accessibility of health services and radiotherapy resource limitation have led to delays. Proper initiatives should be taken to remove the obstacles in cancer care pathway and subsequently treatment outcome as well as quality of life will be improved.

EP040/#682 CERVICAL CANCER TREATMENT CAPACITY IN AFRICA: MAPPING OF RADIATION ONCOLOGY AND GYNECOLOGIC ONCOLOGY SERVICES
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Objectives To meet demands for cervical cancer care in Africa, there is a need to understand current access to surgery and radiotherapy.

Methods We collected data on gynecologic and radiation oncology staffing and infrastructure capacities from each African country from February-July 2021 through collaboration by querying partners at the International Atomic Energy Agency, National Cancer Institute, International Gynecologic Cancer Society, and African Organisation for Research and Training in Cancer. Cancer incidence data were obtained from GLOBOCAN. The number of radiation oncologists, therapists, physi- cists, and gynecologic oncologists were reported. The adequate number of radiation and gynecologic oncologists were both defined as 2 physicians per 1000 cases (assuming a radiotherapy utilization rate of 63% for cervical cancer cases).

Results Six of 54 (11%) countries reported an adequate number of gynecologic and radiation oncologists. Seven (13%) had neither. Thirty-one (57%) countries reported external beam radiation availability, 25 (46.3%) brachytherapy availability, and 31 (57%) gynecologic oncology availability. In 6 (11%) countries, general gynecologists perform radical hysterectomies. Where data were reported, there were a median of 2 (range 1–13, IQR 2) physicians and 6 (range 1–40, IQR 7) radiation therapy technicians. The number of countries with training for gynecologic oncology, radiation oncology, medical physics, and radiation therapy was 14 (26%), 16 (30%), 11 (20%), and 17 (31%) respectively.

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