

Patients' Self Care for Side Effects of Cancer Chemotherapy

Thesis

*Submitted for Partial Fulfillment of Master Degree in
Nursing Sciences
(Medical Surgical Nursing)*

By

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

لَسْبَدَانِكَ لَا نَعْلَمُ لَنَا
إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ
الْعَلِيمُ الْعَظِيمُ

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List of Abbreviations

Abbreviation	Meaning
DNA	Deoxyribonucleic acid
ACS	American Cancer Society
ADL	Activities of daily living
IADL	Instrumental activities of daily living
BMT	Bone Marrow Transplantation
CCNS	Cell cycle Non Specific
CCS	Cell Cycle Specific
CIA	Chemotherapy induced Alopecia
CINV	Chemotherapy-induced nausea and vomiting
CRF	Chemotherapy related fatigue
HFS	Hand-foot Syndrome
PN	Peripheral Neuritis
HIV	Human immunodeficiency virus
NCCN	National Comprehensive Cancer Network
NCI	National Cancer Institute
OSHA	Occupational Safety and Health Administration
RBCs	Red Blood Cells.

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Abstract

Cancer is a life threatening disease that require comprehensive therapy. Chemotherapy as one of the major modalities of cancer treatment has significant side effects and complications which can alter patient basic functioning, activities and all over patients' needs. Patient self- care has an important role on maintaining health and relieving side effects.

Aim: This study aimed to assess patients' self -care for side effects of cancer chemotherapy. **Design:** a descriptive design was used. **Setting:** the study was conducted at outpatient clinic of Radiation Oncology Nuclear Medicine center and Hematological Oncology units at Ain Shams University Hospitals. **Sample:** a purposive sample of patients with cancer undergoing chemotherapy (N=150). **Tools:** Two tools were used for data collection 1-Structured interviewing questionnaire tool; which is composed of three parts. Socio-demographic characteristic, medical characteristics and knowledge about cancer and chemotherapy 2-Patient assessment needs' tool and self -care activity. It is divided in two parts; assessment patients' needs including physical, psychological, social and religious needs and assess patient ability to perform activities of daily living. **Results:** The present study revealed that more than half of patients had unsatisfactory level of knowledge to all items about cancer and chemotherapy except investigation, doses and duration of chemotherapy was satisfactory. On the other hand, the studied patients had low physical, psychological, social need, and high in religious needs. **Conclusion:** There was highly statistically significant difference between self -care activity and Daily living activities. Regarding physical problem, the most affected systems were GIT system and dermatological system. **Recommendation:** The study recommended a developmental educational program on how to deal with side effects of chemotherapy.

Key words: cancer, chemotherapy, self -care

Introduction

Cancer is the first leading cause of death in economically developed countries and second leading cause of death in developing countries after heart diseases (*Ferlay et al., 2010*). The global burden of cancer continues to increase largely as a result of the aging and growth of the world population and an increasing adoption of cancer – associated life style choices including smoking, physical inactivity and "westernized diets," within economical countries (*Association of Oncology Social Work, 2012*).

The major treatment modalities for cancer include surgery, radiation and chemotherapy. Chemotherapy play an important role in treatment of cancer. Whether utilized alone or in combination with other therapy, it can achieve significant improvement in both the cure rate and the length of survival of persons with cancer (*Aisner, 2012*). Chemotherapy administration was done through several routes, which may be systematic or regional routes; it may be given in inpatient department or in outpatient clinic (*Williamson, 2010*).

Chemotherapy plays important role in cancer treatment to kill cancer cells. Unlike radiation and surgery, which are localized treatment, chemotherapy is a

systematic treatment, by means the drug travel through the whole body. This means chemotherapy can reach cancer cells that have spread, or metastasized to other areas. It may affect persons' physical and psychological functioning (**Beesley et al., 2011**).

Self- care as alearned, goal oriented activity directed toward the self in the interest of maintaining life, health development and well being. Self- care is a requirement of every person, man or women. When self-care is not maintained, illness, diseases or death will occur (**White & Baumle, 2013**). Self-care refers to decision and action that as individual can take to cope with a health problem or to improve his or her health (**Ball, 2012**).

However, persons undergoing chemotherapy might alter their self-care practices in order to meet the physiological and psychological changes occurring as a result of the treatment. Therefore, nurse has a fundamental role in identifying quantity and quality of self-care deficits in patients with cancer and providing the knowledge, skills and support necessary for the maintenance of coping with disease (**Rutten et al., 2014**).

(*Elsie, 2013*), mentioned that the nurse can play crucial role in helping the patient to learn or relearn self-care techniques, and thus focuses on patient response to health and illness rather than on disease itself. When illness or injury interferes with the ability to perform self-care the nurse assists or performs tasks which patients cannot manage, or offers support to family members or other caregivers

Significance of the study:

Cancer is a major health problem in Egypt and many other parts of the world. Currently, one in 4 deaths in the United States are due to cancer, that it has now jumped from the third to the second leading cause of death, right behind cardiovascular disease. Largely across the board, the number of new cancer cases and deaths has steadily increased, with 14.9 million new cases and 8.2 million deaths estimated in 2013 in American (*NCI, 2015*).

Cancer prevention, screening, and treatment programs are costly, and it is very important for countries to know which cancers cause the highest disease burden in order to allocate scarce resources appropriately to improve patients self-care for side effects of chemotherapy.