بسم الله الرحمن الرحيم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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شبكة المعلومات الجامعية

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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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MONA MAGHRABY

Scanxiety and Psychological Distress in Cancer Patients at Routine Follow Up Visits

Thesis

Submitted for Partial Fulfilment of Master Degree in Clinical Oncology and Nuclear Medicine

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Introduction

The incidence of cancer is increasing. The number of patients surviving cancer increases as well ***(Parry, Carla et al., 2011).*** Due to improvements in cancer detection and treatment, two-thirds of those diagnosed with cancer today will live more than five years, with a resulting rising population of long-term survivors ***(Miller et al., 2016).***

After completion of definitive treatment, surveillance is recommended with the goal of improving disease-specific (DSS) and overall survival (OS) by detecting disease recurrence or a second primary cancer early, such that a patient has an opportunity for potentially curative treatment. Additionally, surveillance can be effective in monitoring long-term treatment toxicity, managing patient anxiety, and assuring continuation of cancer survivorship care. However, in many cancers, the optimal surveillance strategy is unknown, and recent data from randomized trials have not demonstrated significant survival benefit from intensive follow-up ***(Rosati et al., 2016).***

In colorectal cancer for example, data to inform which testing is most beneficial and how often testing should be performed in surveillance is limited. ***(Benson et al., 2015).***

With the increasing visibility of survivors has come awareness that mental health concerns are prominent among survivors unmet needs, not only anxiety and depression but also various aspects of cancer-related distress. Many survivors adjust to cancer and its associated treatments but a subgroup struggles with emotional adjustment in the survivorship period. It is important to address these mood concerns because they can be barriers to engaging in survivorship care in addition to disrupting quality of life and return to usual activities. ***(Berg et al., 2016).***

According to the US-American National Comprehensive Cancer Network Clinical Practice Guideline, distress is "a multifactorial unpleasant emotional experience of a psychological (cognitive, behavioral, and emotional), social, and/or spiritual nature that may interfere with the ability to cope effectively with cancer, its physical symptoms and its treatment. Distress extends along a continuum, ranging from common normal feelings of vulnerability, sadness, and fears to problems that can become disabling, such as depression, anxiety, panic, social isolation, and existential and spiritual crisis" ***(NCCN, 2013).***

Cancer-related distress is associated with impaired quality of life, reduced satisfaction with care, and worse overall survival ***(Bidstrup et al., 2011).***

Routine follow-up visits may raise stress and anxiety in survivors of cancer as has been suggested that anxiety is exacerbated by clinic attendance and scans, which may serve as a reminder of disease and the continued risk of recurrence ***(Aggestrup et al., 2012)***. Scans are ubiquitous in modern oncology care, and represent a significant cost to our healthcare system ***(Huntington et al., 2015).*** Scans may exacerbate "scanxiety" and may contribute substantially to cancer-related distress. "Scanxiety" refers to the often-debilitating anxiety, patients with cancer experience in the period surrounding imaging studies for their cancer. ***(Smedley & Sikora, 1985). Thompson et al., (2010)*** examined the relation between surveillance scan and anxiety in lymphoma survivors, the researchers found that 37% of participants had symptoms of clinical anxiety, and that fear and anxiety heightened around the time of follow up scans, starting a week before the visit. Also ***Bauml et al., (2016)*** found that 73% of patients of NSCLC who had a recent scan reported some degree of distress.

It is also suggested that a certain group of patients still feels more anxious after the follow-up visits. (***Papagrigoriadis & Heyman, 2003***).

On the other hand, other research suggests that survivors experience minimum anxiety prior to the routine follow-up visits and during the visit and the survivors experience the follow up visits as reassuring ***(Sandeman & Wells; 2011).***

Aim of the Work

To asses scanxiety and psychological distress associated with routine surveillance imaging at routine follow up visits among cancer patients, and different factors affecting its severity.

Scanxiety

Cancer and Psychology

Cancer is a general term for a category of diseases that are not easily defined because of their multi-causal nature and the variety of pathways that can contribute to their occurrence in various sites of the body. However, there is a fundamental feature common to all types of cancer that is specifically described in the definition of the National Cancer Institute (2010): "Cancer is a term used for disorders in which abnormal cells divide out of control and are able to infiltrate other tissues." Infiltration of other parts of the body by cancerous cells is called metastases. In other words, cancer cells have lost their capacity to act as cohesive tissue elements, becoming mutant cells that populate out of balance. More than 100 types of cancer have now been reported, but the number is expected to continue to expand in the future. ***(Heng, Henry HQ, et al., 2010).*** According to the World Health Organization (WHO) estimates, the incidence of cancer is expected to rise by 2030, with new cancer diagnoses rising from 13.2 million in 2010 to 21.2 million in 2030 and cancer deaths increasing from 7.8 million to 13.2 million. Also, early diagnosis and advancement in cancer treatments have also led to a rise in survival for about 25 million individuals (long-

term survivors) worldwide. Among non-communicable diseases, cancer is the second leading cause of death in the world. ***(Siegel et al., 2020).***

Diagnosis and cancer treatment have resulted in many social, physical and psychosomatic issues for cancer patients. ***(Waller et al., 2011***). Cancer diagnosis and therapy cause modification in paths of patients' life, their daily activities, jobs, relationships and family roles, and can lead to a high degree of psychological distress. ***(Bhattacharjee and Banerjee; 2016).*** This distress tends to be anxiety and/or depression. For those with no prior psychiatric history, cancer diagnosis is linked to a higher risk of certain psychological illnesses that can adversely impact cancer care and recovery, in addition to quality of life and survival. ***(Pitman et al., 2018).***

Patients report different emotions before and after diagnosis, and yet when considered well-adjusted persons, they may encounter emotions ranging from shock, denial, anger, negotiation, and acceptance to depression, anxiety, and even suicidal attempt. (***Cocks et al., 2016).***

Cancer is perceived not only as a chronic illness, but also a hazard to the life of the patient, and had caught the interest of scholars, in particular psychologists. The importance of patient

experience is no longer limited to the biological consequences of the illness or the recovery process, but rather refers to their functioning in a psychological and social dimension. ***(Sylwia et al., 2019).*** Several studies have found that clinically severe stress is associated with maladjustment, decreased quality of life and disrupted social relationships, longer recovery time, poor compliance to medication and likely shorter survival ***(Mitchell et al., 2011).*** In addition, cancer patients appear to hide their feelings. Emotions may be expressed internally, leading to somatic symptoms or ambiguous anxiety, which may be ignored. As indirect somatic symptoms, such as pain, difficulty breathing, tiredness, headache, fever, can be misinterpreted as part of the symptoms of cancer. In such situations, neither the medical personnel nor the patient perceives these problems as psychological issues, which lead to misdiagnosis which in turn, hinders early initiation of psychological therapies. ***(Ha, Su Hong et al., 2019).***

Important progress has been made in biomedical care for cancer, which has not been accompanied by high quality care of the psychosocial consequences of cancer. Several cancer patients complain that those in charge did not acknowledge their psychological needs, did not identify and resolve stress and anxiety, did not direct them to appropriate services, such as

psychiatrists, and did not generally consider psychiatric assistance to be a significant aspect of good medical care. ***(Adler and Page, 2008).***

Psychological Problems in Cancer Patient

Common psychiatric disorders that can be found in cancer patients include anxiety, depression, post-traumatic stress disorder, adjustment disorders, sexual problems (as low sex desire, erectile dysfunction, lack of attractiveness), delirium, and other neurological disorders. Other symptoms can include suicidal attempts, loss of family and social support, personality disorders that trigger problems in the form of severe stress, failure to make choices, grieving, low quality of life, moral and religious concerns. ***(Gregurek et al., 2010).***

There is clear evidence today that approximately 30 percent of all cancer patients experience some form of psychiatric illness. In fact, over the last 25 years, a substantial number of psycho-oncology studies have shown that 30–40 percent of cancer patients have adjustment disorders, and have psychological problems–primarily stress, anxiety and adjustment disorders according to World Health Organization's International Classification of Disorders (ICD-

10) and the American Psychiatric Association's Diagnostic and Statistical Manual (DSM-IV) taxonomic systems ***(Mitchell et al., 2011).*** additional 15–25 percent show other psychological disorders, such as health anxiety, irritability, demoralization or general emotional disturbance, which are not detected by the usual systems of categorizations (e.g. DSM-IV and ICD-10) but by other ones (like; the Diagnostic Criteria for Psychosomatic Research) and which are dysfunctional and maladaptive symptoms ***(Caruso et al., 2017).***

Pathological anxiety is characterized by the following:

1. To be out of proportion to the level of threat.
2. Being persistent or may deteriorate if no intervention occurred.
3. Severe symptoms that is intolerable regardless of the level of threat (including repeated panic attacks, extreme physical problems, and pathological attitudes such as fears of sudden death).
4. Disruption of normal functioning. These symptoms are used to describe anxiety disorders in the common diagnostic systems used in psychiatry; (ICD–10) and (DSM-IV). In fact,