

Depression in Non-Small-Cell Lung Cancer Patients Treated at K Hospital During 2021 – 2022

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ABSTRACT

Objective: This study aimed to describe depression in non-small cell lung cancer patients treated at K Hospital from 2021 – 2022.

Method: Cross-sectional descriptive study. The study was conducted on 243 NSCLC patients treated at K Tan Trieu Hospital by direct phone call interview and psychiatric clinical examination. We applied the PHQ-9 scale and DSM-5 for screening and confirmed depression.

Results: The study found that the proportion of depression in 243 non-small cell lung cancer patients treated at K Hospital was 10.7%, many patients in the study were in late stage, and stage III or more accounted for more than 80%.

Conclusion: This study has some implications for improving comprehensive care for NSCLC patients.

Keywords: Depression Status; Non-Small Cell Lung Cancer

Introduction

Cancer deaths are rising worldwide. GLOBOCAN 2020 ranks Vietnam 91/185 for new incidence and 50/185 for mortality per 100,000 people. This rank exceeds 2018's 99/185 and 56/185. Lung cancer is also the second most common cancer worldwide [1]. Cancer treatment is lengthy and expensive. Cancer patients experience stress, anxiety, and depression most often [2]. In McFarland Daniel C. (2020) studied 170 lung cancer patients with tumor mutations and found that 18.9% had depression associated with anthropometric factors and tumor characteristics [3]. Depressed lung cancer patients have been studied in many countries, but few have been studied in Vietnam. Duong Anh Tai et al. found that 39.7% of 73 non-small cell lung cancer patients at Bach Mai Hospital's Nuclear Medicine and Oncology Center had depression in 2021[4]. To contribute to improving the quality of medical services and quality of life for patients, we carried

out the study "Depression in non-small cell lung cancer patients treated at K Hospital during 2021 – 2022".

Research Methods of Study

Study Subjects

The study was conducted on 243 non-small cell lung cancer patients being treated at K Hospital in 2021-2022. The age of patients from 18 to 65 who had confirmed non-small cell lung cancer diagnosis by pathology. The study period was from 09/2021 to 09/2022 at K Hospital, Tan Trieu Campus, Hanoi.

Study Methods

This was a cross-sectional descriptive study that used the PHQ-9 depression screening scale, and psychiatrists used the PHQ-9 and DSM-5 to classify depressed patients.

Data Management and Analysis

Information was collected directly on the questionnaires of study subjects that had been built with a set of questions. Data were entered and monitored by Excel and processed using SPSS version 20.0 software.

Results

Cancer Characteristics of the Study Subject

Table 1 presents the time to treatment from diagnosis ranging from 1 to 99 months, with a median of 7 months. Many of the patients were in late-stage disease, and stage III or more accounted for more than 80%. The main treatment method was targeted treatment (39.1%), followed by chemotherapy (25.9%), radiotherapy (19.8%), surgery (8.6%), and immunotherapy (6.6%).

Table 1: Disease characteristics of study participants.

| Variables | Frequency (n = 243) | Percentage (%) |
|-----------------------------------|---------------------|----------------|
| Time of Diagnosis (months) | | |
| Median (interquartile range) | 7 (5-15) | |
| Min-max | 1 | 99 |

| | | | |
|-------------------|---------|-----|------|
| Disease stages | I - III | 122 | 50.2 |
| | IV | 121 | 49.8 |
| Stage I | | 6 | 2.4 |
| Stage II | | 23 | 9.5 |
| Stage III | | 93 | 38.3 |
| Stage IV | | 121 | 49.8 |
| Treatments | | | |
| Surgery | | 21 | 8.6 |
| Radiotherapy | | 48 | 19.8 |
| Chemotherapy | | 63 | 25.9 |
| Target treatment | | 95 | 39.1 |
| Immunotherapy | | 16 | 6.6 |

Depression in Non-Small Cell Lung Cancer Patients

Figure 1 shows the prevalence depression levels of the study participants in the PHQ-9, in which mild depression (13.2%) accounted for the highest rate, moderate depression (7.8%), moderately severe depression (2.5%) and severe depression (0.4%). According to Figure 2, proportion of depression with NSCLC in DSM-5 accounted for 10.7% while no depression group accounted for 89.3%.

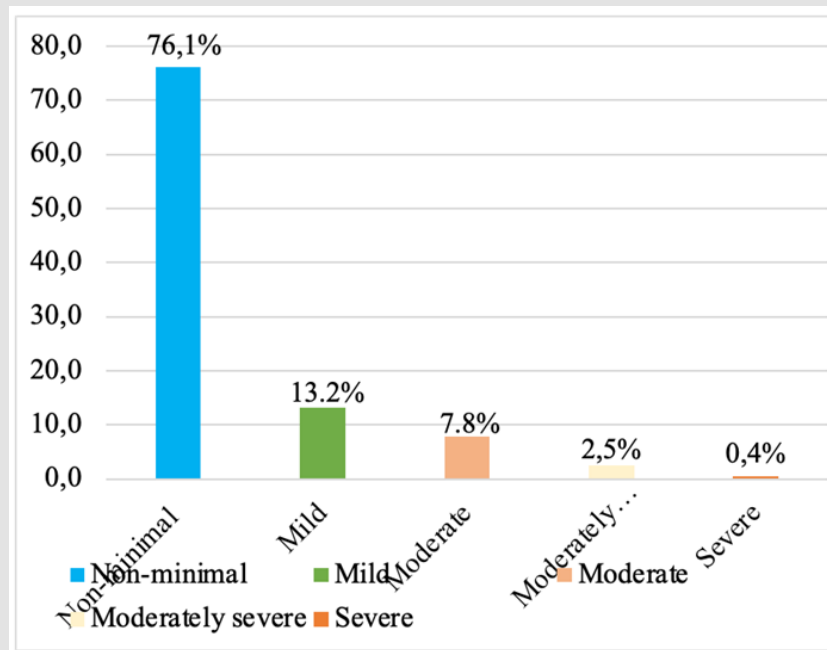


Figure 1: Distribution of depression levels in PHQ-9.

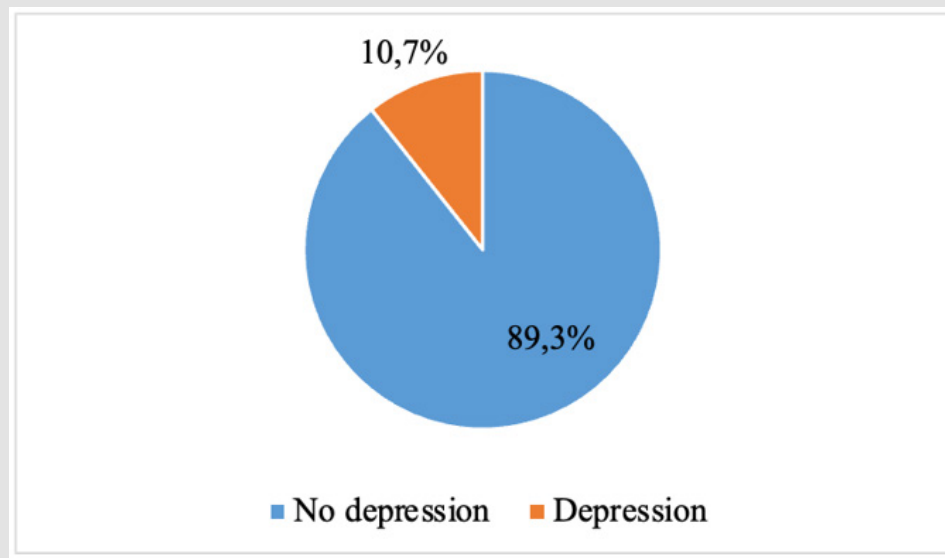


Figure 2: Distribution of study participant's depression in confirmed depression by DSM-5.

Discussion

Depression of Study Participants in PHQ-9

Our study result was consistent with the study of Naser Abdallah Y. et al. in all groups: mild (27.0%), moderate (12.4%), moderately severe (9.2%), and severe (5.4%) [5]. The result also matched other studies with most depression in PHQ-9 being mild, followed by moderate, moderately severe, and severe [6].

Depression of Study Participants in DSM-5

In the study, it was found that the group of patients with non-small cell lung cancer had depression in the DSM-5; the percentage of study participants who met the criteria for depression was 10.7%. Our finding was lower in the 2018 study by McDermott Cara L. of 13,827 non-small cell lung cancer subjects with stage IIIB or IV disease in the US (11%) [7]. The difference can be explained by differences in demographic characteristics between the study groups.

Conclusion

To Investigate Depression in Non-Small Cell Lung Cancer Patients Treated at K Hospital from 2021 - 2022

The overall prevalence of depression among 243 non-small cell lung cancer patients treated at K Hospital during 2021-2022 by DSM-5 was 10.7%. The levels of depression by PHQ-9 in the above partici-

pants were categorized into four groups: mild level (13.2%), moderate level (7.8%), moderately severe (2.5%), and severe (0.4%).

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