International Conference on
Emergency & Personalized Medicine
December 05-06, 2022 | Dubai, UAE

International Journal of
Cardiovascular Research
ISSN: 2324-8602

Volume 10
Issue 4

Effect of Employment Class on Age of Tracheal, Bronchus, and Lung Cancer Mortality

Aly K, Abdul Rahman A, Al-Ansari A, Al-Emadi L, Al-Heidous A, Al-Thani S

Weill Cornell Medicine- Qatar

Abstract:

Background: Tracheal, bronchus, and lung cancer (TBL) is one of the leading causes of cancer death worldwide[1]. Occupational exposures in industries such as mining, construction, and manufacturing have been recognized as major risk factors for TBL cancer[2]. It is thus imperative for these industries to employ strong safety and control measures. However, the working conditions and integration of occupational exposure preventative measures vary. Here we investigate if there is an association between the class of worker and age of TBL cancer mortality.

Methods: This study utilizes the National Longitudinal Mortality Study (NLMS) database, which includes 745,162 records of patients who were interviewed in April 2002 and followed up for 6 years in the United States. All records of individuals in whom "tracheal, bronchial, and lung cancer" was indicated as the cause of mortality were extracted. This search yielded 115 records of individuals who died within the six years following their interview. Six of these patients did not have records for employment status. The remaining 109 were stratified by class into either government (35.7%), private (53.2%), or self-employed (11.1%). The statistical significance in the mean age of mortality among the different groups was assessed with ANOVA followed by a Bonferroni multiple comparisons test.

Results: There was a significant difference (p-value<0.05) in the mean age of mortality for TBL cancer between patients employed by the private sector (mean age 54.78 years) and those who are self-employed (mean age 64.93 years), as well as between patients employed in the government sector (mean age 54.56) and self-employed.

Conclusions: The age of mortality from TBL cancer is significantly lower in self-employed individuals working in the mining, construction, and manufacturing industries compared to their private and government counterparts. This highlights the potential lack of effective safety regulations that these industries employ for their workers. Self-employed individuals prioritize personal safety and thus adhere to stricter preventative measures to reduce occupational hazards. This suggests that the outcomes of workers in private and government industries can indeed be improved if similar protocols are followed and standardized safety practices are enforced.

Biography:

Kareem Aly is a dedicated medical student at Weill Cornell Medicine Qatar, with a keen interest in exploring the intricate relationship between occupational health and disease. His academic pursuits have led him to delve into critical research on the epidemiology of tracheal, bronchus, and lung (TBL) cancer, aiming to uncover the impact of occupational exposures on mortality trends. His commitment to advancing knowledge in this field stems from a strong desire to contribute to the development of effective safety measures within industries prone to TBL cancer risks. Through his studies and research, Kareem aspires to promote better working conditions and enhance the well-being of individuals in diverse occupational settings.

International Journal of Cardiovascular Research
ISSN: 2324-8602
Volume 10
Issue 4

About Research Topic

Tracheal, bronchus, and lung cancer (TBL) collectively represent a significant global health challenge, accounting for substantial morbidity and mortality. These malignancies are notorious for their high incidence rates and dire outcomes, contributing to the ranks of the most common and deadly cancers worldwide. While the etiological factors behind TBL cancer are complex and multifaceted, emerging evidence underscores the role of occupational exposures as crucial determinants of disease incidence and progression. Of particular concern are industries such as mining, construction, and manufacturing, where individuals are frequently exposed to an array of carcinogenic agents, including asbestos, radon, and various industrial pollutants. The implications of such exposures are magnified by the variability in working conditions and the degree of adherence to safety and control measures within different sectors. As these industries play a pivotal role in global economies, the correlation between employment class and TBL cancer outcomes becomes an issue of paramount importance, with far-reaching consequences for public health and occupational safety.

About Institution

Weill Cornell Medicine-Qatar (WCM-Q) stands as a prestigious branch of Weill Cornell Medicine in New York, embodying a commitment to providing world-class medical education and healthcare services in the Middle East. Established in 2001 in partnership with the Qatar Foundation, WCM-Q serves as a beacon of academic excellence and research innovation. With its state-of-the-art facilities, esteemed faculty, and a comprehensive curriculum, WCM-Q plays a pivotal role in nurturing the next generation of medical professionals, researchers, and healthcare leaders in Qatar and beyond. As an embodiment of the Qatar Foundation's vision for education, scientific advancement, and community development, WCM-Q contributes significantly to the region's healthcare landscape, promoting the highest standards of medical practice and research.

References:

1. Sung, H., Ferlay, J., Siegel, R. L., Laversanne, M., Soerjomataram, I., Jemal, A., & Bray, F. (2021). Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. CA: a cancer journal for clinicians, 71(3), 209–249. https://doi.org/10.3322/caac.21660

2. Shankar, A., Dubey, A., Saini, D., Singh, M., Prasad, C. P., Roy, S., Bharati, S. J., Rinki, M., Singh, N., Seth, T., Khanna, M., Sethi, N., Kumar, S., Sirohi, B., Mohan, A., Guleria, R., & Rath, G. K. (2019). Environmental and occupational determinants of lung cancer. Translational lung cancer research, 8(Suppl 1), S31–S49. https://doi.org/10.21037/tlcr.2019.03.05