

AVICENNA AND CANCER STUDY

Rahim, NS^{1,2*}, Othman, R³, Shah, MUM⁴, Salleh⁵, HM, Afandi, NHMNA⁶, Sazalli, NAH⁷, Ab Ghani, N³, Abas, N⁸, Manap, S⁹, Suria, MM¹⁰ and Tan, NAS¹¹

¹Department of Pharmaceutical Life Sciences, Faculty of Pharmacy, Universiti Malaya,

²Department of Biology, Faculty of Applied Sciences, Universiti Teknologi MARA, Perlis Branch, Arau Campus, Arau

³Department of Orthopaedic Surgery (NOCERAL), Faculty of Medicine, Universiti Malaya,

⁴Faculty of Bioscience, Universiti Malaya,

⁵Department Of Syariah, Faculty of Islamic Studies, Pahang Sultan Ahmad Shah Islamic University

⁶Akademi Sinergi Ikhlas

⁷Department of Mechanical Engineering, Faculty of Engineering, Universiti Malaya,

⁸Department of Dakwah & Human Development, Academy of Islamic Studies, University of Malaya

⁹Faculty of Electrical and Electronic Engineering Technology, Universiti Malaysia Pahang, Pahang, Malaysia

¹⁰Tropical Infectious Diseases Research and Education Centre (TIDREC), Institute for Advance Studies (IAS), Universiti Malaya

¹¹Department of Physiology, Faculty of Medicine, Universiti Malaya

*Corresponding Author: nursyafiqahrahim@gmail.com

ABSTRACT Cancer is the main cause of mortality after COVID-19, reaching pandemicity and remains one of major public health concern. It is worthwhile to consider the perspectives of the renowned medical scholar, Avicenna and he is widely regarded as the prince of physicians. However not much recent paper discussed on his practice on treating cancer. The review's goal was to discuss the background of Avicenna's bibliography and history in cancer study. This review encompasses 25 literatures and begins with a description of his profile and attitude. It then explains his medical background and interests, with an emphasis on cancer research. His contribution and a major milestone in cancer research were described. It also explains in great depth his perspective on cancer research. His proposed and implemented cancer prevention and treatment are listed and advised in order to lessen the negative impacts of cancer. To conclude, early detection and preventative measures aid in the reduction of cancer progression. In addition, plant base and less irritant treatment as well as improving the diet help to reduce malignancy. This review might contribute to give an insight to improve the

current cancer treatment by looking back into the perspective of great scholar in medical field.

Keywords: Avicenna; cancer; medical; scholar; treatment

1. INTRODUCTION

The emergence of the cancer pandemic is masked by the COVID-19 pandemic, and cancer patient mortality rates are rising due to a lack of medical care (Wasim, Tahir, Siddiqi, Jabbar, & Ullah, 2022). Cancer is one of the primary causes of mortality after COVID-19, and the pandemic's impact on cancer diagnosis is a serious public health concern (Drescher et al., 2022). Given the significant incidence of cancers in current times, it is worth looking into the perspectives of the renowned Arab-Muslim medical scholar, Ibn Sina, also known as Avicenna.

2. AVICENNA: THE PRINCE OF PHYSICIANS

2.1 His profile, attitude and interest

Avicenna, a Latinized name commonly used in the West (Arabic: Ibn Sina, ابن سينا) (Georgoulas, 2022) was one of the most outstanding philosophers and physicians who had a profound influence on medical science in the golden ages of Islamic medicine (9–12th century AD), and in Europe (Valizhanovna, 2022). Avicenna was born around 980 AD in Afshanah (Iran) and died in Hamadan (Uzbekistan) at 57 years old (1037 AD) (Erolin et al., 2013). His father, Abdullāh, was a government tax collector and carefully supervised his son's education (Amr & Tbakhi, 2007). Avicenna was a child prodigy who recited the whole al-Quran at the age of 10. During his teenager, he learned multiple languages and mastered several disciplines: mathematics, physics, metaphysics, astrology, geology, chemistry, alchemy, anatomy, physiology, pharmacology, and toxicology and medicine (Amr & Tbakhi, 2007; Dunn, 1997; Zargarani, Mehdizadeh, Zarshenas, & Mohagheghzadeh, 2012). Avicenna was one of the greatest thinkers of his era. He was intelligent, brave in exploring new ideas and had an intense pleasure and curiosity to investigate the universe's origin, and of life itself. He was also persistent, fast in learning and had a strong memory, which allowed him to memorize theological texts and mastered rhetoric and mathematics even during his childhood. Avicenna was a skilled medical practitioner and a scientific observer (Chamsi-Pasha & Chamsi-Pasha, 2014) that emphasized significant detail and accuracy while diagnosing disease (Sadeghi, Ghaffari, Heydarirad, & Alizadeh, 2020;