Molecular Docking Studies of Some Antiviral and Antiinflammatory Drugs Via Bindings to ACE-2, Protease and Polymerase Enzymes of the Novel Coronavirus (SARS-CoV-2)

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1. Introduction

A novel severe acute respiratory syndrome coronavirus (SARS-CoV-2) was identified from respiratory illness patients in Wuhan, China in December 2019 [1, 2], which is closely related to severe acute respiratory syndrome CoV (SARS-CoV). Today, no specific drugs are available to treat this disease. Thus, there remains an urgent need for the development of specific antiviral therapeutics against SARS-CoV-2. A number of pharmacological agents are currently being tested [3-5]. A better understanding of the underlying pathophysiology is required. Due to the similarities of SARS-CoV-2 with the original SARS-CoV, several laboratories are focusing on the viral transmembrane protein (the spike glycoprotein, S), a small envelope protein (E), matrix glycoprotein (M), nucleocapsid protein (N), and the NTEP (the viral protease required for the maturation of the protease polyprotein (PRR).)

Drug-like inhibitors, such as 3CL-protease and 4CL-protease, have been screened in patients with SARS or MERS, although the efficacy of these drugs remains controversial [6], whereas other antiviral drugs such as remdesivir and ganciclovir have been tested in patients with SARS or MERS, although the efficacy of these drugs remains controversial [6].
Impact of COVID-19 pandemic on healthcare providers: save the frontline fighters

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Abstract

The novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) caused a pandemic of coronavirus disease 2019 (COVID-19) which represents a global public health crisis. Based on recent published studies, this review discusses current evidence related to the transmission, clinical characteristics, diagnosis, management and prevention of COVID-19. It is hoped that this review article will provide a benefit for the public to well understand and deal with this new virus, and give a reference for future researches.

Keywords: Coronavirus, COVID-19, SARS-CoV-2, Pneumonia, Respiratory Infection
COVID-19 Cases in Iraq; Forecasting Incidents Using Box - Jenkins ARIMA Model

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Abstract: The pandemic outbreak of COVID-19 has caused great damage to people's health and the economy worldwide. The present investigation aims to provide a reliable forecasting model for the COVID-19 incidents in Iraq by using the Box-Jenkins ARIMA model. The results of this study show that the ARIMA (2,1,0) model is suitable for forecasting the number of COVID-19 cases in Iraq. The Box-Jenkins ARIMA model is a valuable tool for predicting the future of the COVID-19 incidents in Iraq, providing policymakers with useful information to make informed decisions.
Detrimental effects of quarantine, social lockdown and other social suffers due to Covid-19 pandemic on human health aspects

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ABSTRACT

Background: Novel coronavirus disease (Covid-19) is a very highly transmissible type of viral respiratory disease. Human mucosal barrier and other control measures had failed to stop its growing. Therefore, the government declared lockdown on the society in order to prevent the spread of Covid-19, lockdown and quarantine do this in negative impact on general public health. These effects occurred by psychological, socioeconomic and manifestation effects. Aim of the review is to focus the light on the possible negative detrimental effects of social lockdown and quarantine on human health aspects.

Result: It was seen during the previous studies and evidence with prior pandemic and ordinary related to social lockdown, the problem and situation were usually faced with many detrimental effects on human health. These effects are psychological and socioeconomic effects and manifestation effects. The detrimental effects are visible in mental and physical aspects. Some common types of problems were in patients on quarantine. Emotional stress disorder was among the most important and others were turned over other people's problems. Virtual 12 is declared due to lack of support and social media in addition to lower and upper body pains caused the musculoskeletal arm of the effects related to social lockdown.

Keywords: Quarantine, social lockdown, Covid-19, pandemic.

INTRODUCTION

As of February 2020, about seven million people have been infected with in total, 196,000 cases were recorded worldwide. Of course, there was n-19 worldwide, 327,000 severe or critical condition (1). This disease that was first appeared in China. Various cities in China were locked down and it is known as severe acute respiratory syndrome (SARS). It is novel coronavirus disease (Covid-19) and it is known as severe acute respiratory syndrome (SARS-CoV-2) and is from family beta coronavirus (CoV). Novel coronavirus disease (Covid-19) is a very highly transmissible type of viral respiratory disease. Lockdown and other control measures have been effective in preventing the spread of the disease but the risk of death due to the virus, lockdown and other control measures have been effective in preventing the spread of the disease but the risk of death due to the virus, lockdown and
Effect of COVID-19 on Cancer: With Special References to Liver Cancer

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ABSTRACT

Background: It has been observed that patients suffering from COVID-19 are at a higher risk of developing cancer due to various reasons. The present study aims to highlight the impact of COVID-19 on cancer and to review the current literature on the effects of COVID-19 on the liver.

Materials and Methods: A comprehensive review of the literature was conducted using PubMed, Google Scholar, and other scientific databases. The search was limited to English-language articles published between January 2020 and December 2020.

Results: The literature review revealed that COVID-19 can lead to a higher risk of developing cancer due to various factors, including the immune system's overactivation, inflammatory response, and increased risk of viral infections. The liver is particularly vulnerable to the effects of COVID-19, with a high risk of liver damage and deterioration.

Conclusion: Further research is needed to understand the mechanisms by which COVID-19 affects cancer development and progression. This review highlights the importance of addressing the interplay between COVID-19 and cancer to develop effective prevention and treatment strategies.