



A Survey Study on the Effectiveness of Prevention and Sterilization Methods Used to Limit the Spread of Covid 19 in Basra, Southern Iraq

Nada J. Dawood¹, Haider Y. Abdulrazaq², Ali F. Hussein², Huda Hakim Sadoon²

¹Department of Medical Laboratories Techniques, Technical Institute of Basra, Southern Technical University, Basra, Iraq.

²Department of Nursing Technique, Technical Institute of Basra, Southern Technical University, Basra, Iraq.

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ABSTRACT

Corona virus caused large numbers of infections and deaths in the world including Basra, southern of Iraq (figure 1). The aim of the study was to conduct a questionnaire that may clearing up the sterilization mechanisms used to combat the virus and choose the most effective one for dealing with the outbreak. In addition, its indicating the most efficient preventive measures to prevent the spread of the corona virus as AL- Basra has recorded high infection rates due to the proximity of its borders with Iran. which has a high rate of virus spread. The study showed through collecting data from people that the main reason for the spread of the virus and was people's ignorance of the nature of the virus (35.6%) and poor health care provided (30.4%) which made Iraq record the highest percentage of deaths and infections at this region and specifically in Basra.

1. Introduction

Corona virus cause acute and chronic respiratory, enteric and CNS diseases in humans. (McIntosh, K.1974.) Corona viruses are affect multiple systems sense it RNA viruses (Weiss SR.2011), (Li G. Fan 2020). The disease caused by SARS-CoV-2 that's also knowing by a highly contagious pneumonia (SSCP), So recently (in 2019) World Health Organization called this pneumonia that caused by Corona virus appears in Wuhan as Covid-19 (Wu YC. Chen CS), (Chan YJ. 2020).

Hence, this newly developed viruses pose a major threat to global public health. during the past two decades. The current emergence of COVID-19 has been the third outbreak of COV for humans. This

new virus comes from sub-Orthocoronavirinae type (Munster VJ. Koopmans 2020).

Infection of SARS-CoV-2 incubation period is around 14 days following exposure, but most cases take just about four to five days for appearing the symptoms. The common clinical characteristics include dry cough, fever, fatigue, sore throat, conjunctivitis headache, rhinorrhea, dyspnea, myalgia, nausea, diarrhea and vomiting. Therefore, there is no unique clinical feature for differentiating COVID-19 from other lower or upper airway viral diseases. In a some of cases after 7 days, COVID-19 may developing to

Corresponding author:

E-mail addresses: n.alkamil@stu.edu.iq (Nada), haider.younis@stu.edu.iq (Haider), a.faisal@stu.edu.iq (Ali), hhakim@stu.edu.iq (Huda)

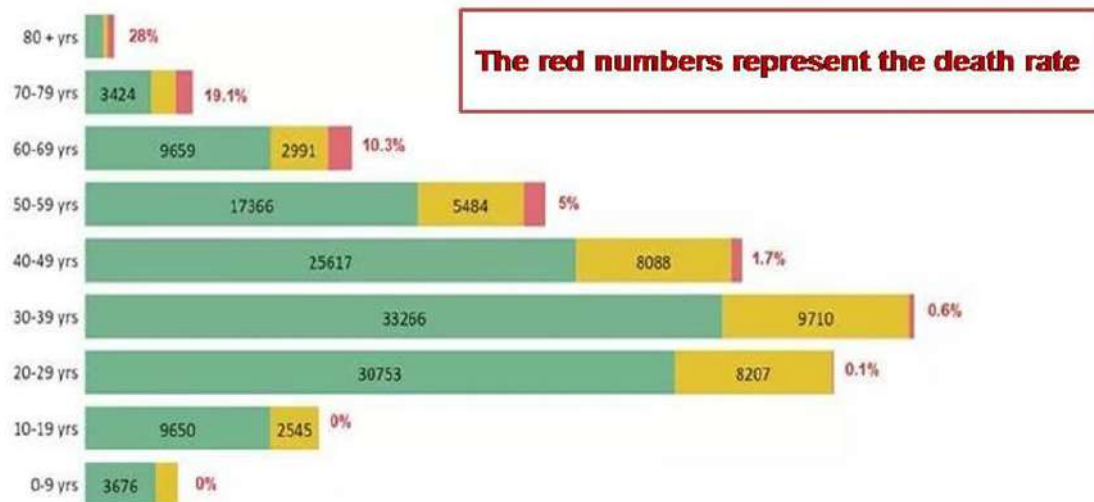
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pneumonia, pulmonary failure and death (Özdemir 2020).

Corona viruses is significantly varying in risk factor. It can cause colds with major symptom such as sore throat from swollen adenoids and fever (Liu P. Shi et al. 2017). Hand hygiene with face masking are important in preventing the

transmission of COVID-19 which are not mutually expensive (Lai THT. 2020) and having a high potential to reduce the spread of respiratory infections in general (Jefferson T. Foxlee) (R. Del Mar C et al) in addition to sterilizing homes and public areas to prevent an increase in the rate of death and infections.



(Figure1) Infections and deaths in the world including Basra, southern of Iraq

2. Methods

Through the study, From March 24 to August 4, 2020 very important data were collected. Questions were asked of 1,000 people living in

Basra during the outbreak. The study included an evaluation of the extent of preventive measures and the sterilization mechanism used in homes to prevent corona virus outbreaks (COVID-19) in Basra.

3. Results

The first question: Do you think COVID-19 is affected by high temperature

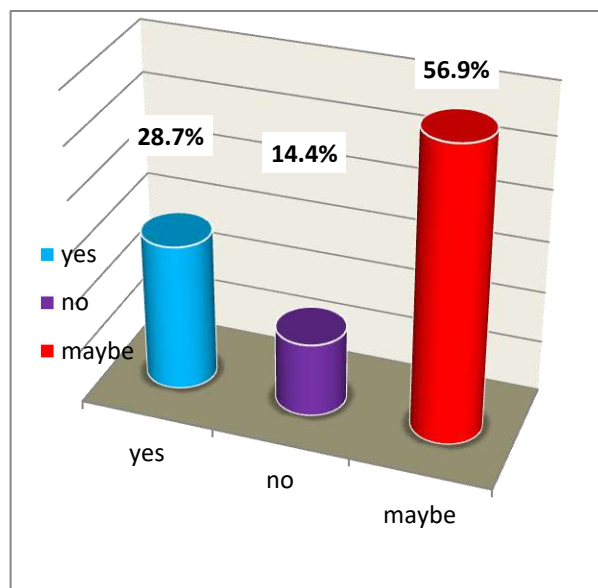


Figure (2) effected of temperature

The Second Question: Do you wear a mask and gloves while leaving in your home?

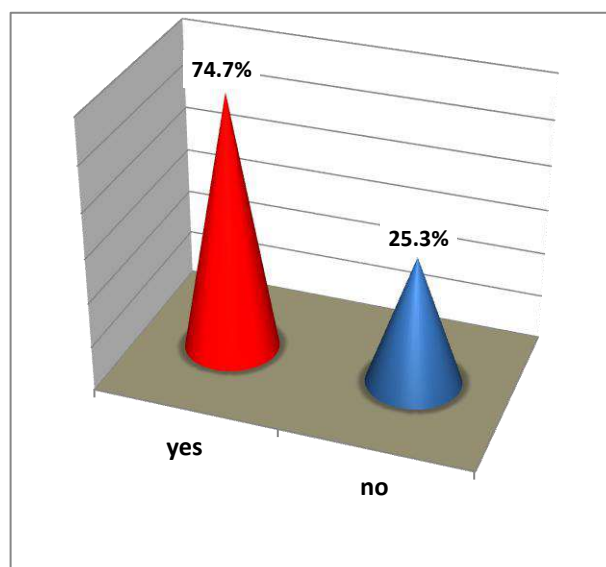


Figure (3) using mask and gloves

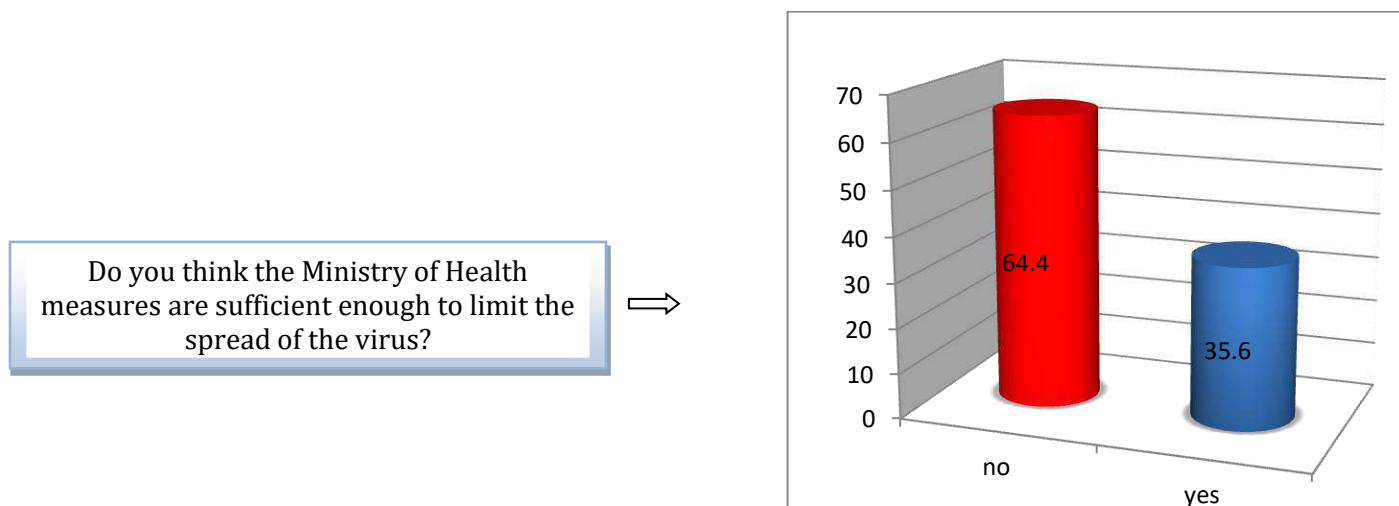


Figure (4) sufficiently of Ministry of Health measures

What are the most things that contributed to the increase in the spread of the epidemic in Basra?

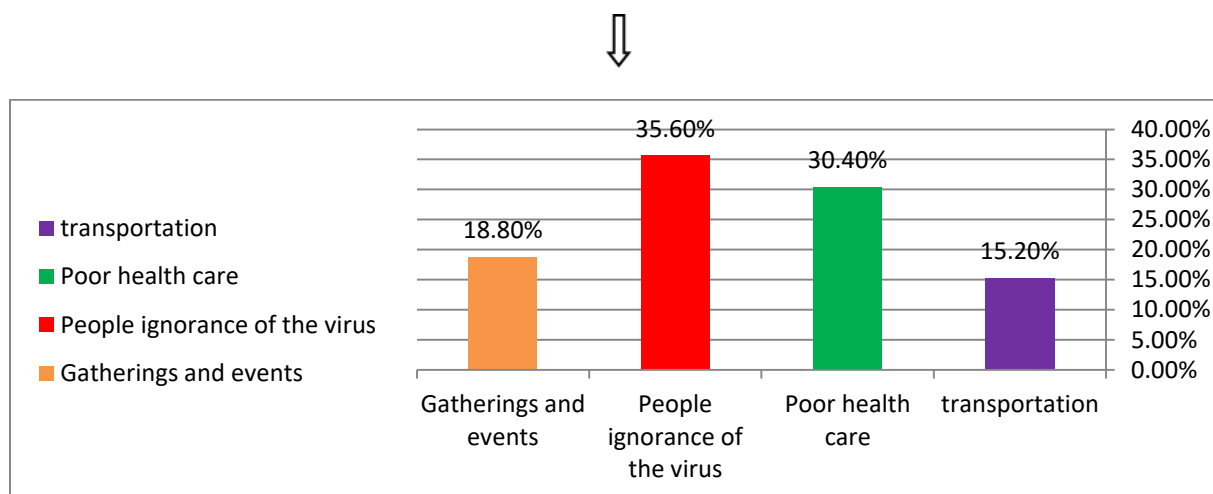


Figure (5) reasons for spread of the virus

What are the sterilizers that you use to disinfect your home?

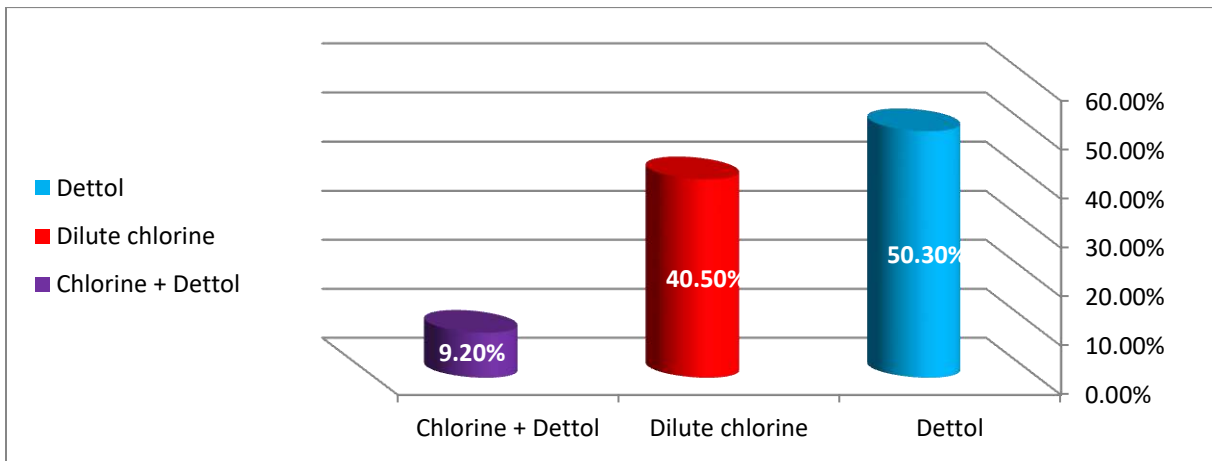


Figure (6) sterilization methods

Did mixing or diluting sterilizers cause an allergic reaction during inhalation or on skin of any of your family members?

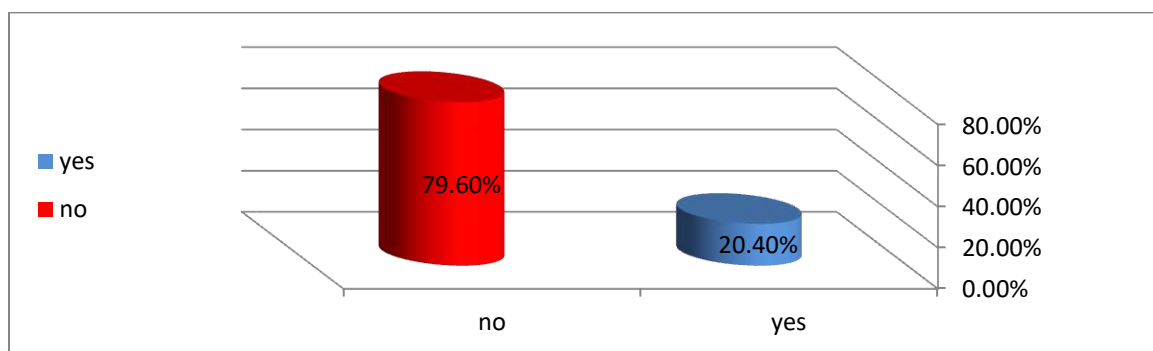


Figure (7) sterilization complications

4. Discussion & Conclusions

A survey of 1000 people living in the center of Basra city was conducted to investigate the preventive measures and the sterilization mechanism used in homes to prevent the spread of Corona virus. The study showed: In (figure 2)

the study revealed that the people who were asked: Do you think COVID-19 is affected by high temperature? Our data consisted: %56.9 (maybe,%28.7 yes,%14.4 No) Where the study showed people's belief that the virus could be affected by high temperature, and this did not happen because Basra has a high temperature,

which may reach 52°C, and the virus was not affected.

In (figure 3) the Second question: Do you wear a mask and gloves while leaving your home? Our data consisted (25.3% no) (74.7% yes) which reflect a good rate for the commitment of people to preventive measures outside the home.

While (figure 4) The third question (Do you think the Ministry of Health measures are sufficient enough to limit the spread of the virus?) the data consisted of (35.6% yes answers and 64.4% no answers) which means that the Ministry of Health measures were not enough to curb the spread of virus.

Figure 5 the fourth question (What are the most things that contributed to the increase in the spread of the epidemic in Basra?) The study showed: The most common reason contributing to the spread of the virus is people's ignorance of the virus (35.6%), as well as poor health care (30.4%) in addition to gatherings and events (18.8%) and transportation (15.2%).

In (figure 6) Fifth question (What are the sterilizers that you use to disinfect your home?) the data consisted: (50.3%) they use Dettol and (40.5 %) dilute chlorine and it is the best to sterilize the home and (9.2%) mixing of (Dettol +chlorine). This mixture caused problems during inhalation or in the skin due to the wrong dilution of the solution.

Also 20.4% of participants had problems with their skin or in breathing was found in (figure 7) due to inhalation detergents and disinfectant materials.

This study concluded that the level of people's knowledge about Corona virus is low. Which reflected negatively on people's commitment to prevention methods as well as using the right ones in the right way.

5. Recommendations

- 1- Avoid unnecessary travel.
- 2- Collecting information about the virus and raising the level of health awareness among people.

- 3- Keep a distance if you go out (stay two meters away).
- 4- Isolate yourself if minor symptoms appear, such as cough, headache, fever and stay at home.
- 5- Avoid going to crowded places.
- 6- Clean your hands regularly and deeply antiseptic hands based on alcohol or wash them with soap and water.
- 7- Seek medical attention if you are suffering from fever, cough and difficulty breathing.
- 8- Maintaining the health of the elderly, as they are the most vulnerable group of infection and death.
- 9- Follow up the preventive instructions issued by the health centers.

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