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# Endemicity of dengue with density figure and maya index in Bengkulu city, Indonesia

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## Abstract

**BACKGROUND:** One of the factors contributing to dengue's endemicity is the density of the dengue vector, namely, *Aedes aegypti* as the primary vector and *Aedes albopictus* as the secondary vector. Bentiring and Kandang Limun villages are high endemic areas of dengue. **AIM:** This study aimed to determine the relationship between dengue endemicity and density figure (DF) and Maya index (MI) in Bentiring and Kandang Limun villages, Bengkulu city. **METHODS:** This study used a cross-sectional design. The sampling technique used proportionate stratified sampling. The sampling refers to the guidelines for dengue entomology surveys according to the WHO 1999 criteria. A total of 400 ovitraps were installed, 200 ovitraps inside the house and 200 ovitraps outside the house. **RESULTS:** The results

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# The Effect of Educational Intervention on Knowledge and Attitudes toward Sexually Transmitted Infections on a Sample of Egyptian Women at Primary Care Level

Tarek Tawfik Amin<sup>1</sup>, Yasmine Samir Galal<sup>1</sup>, Dina Samy Shaheen<sup>2</sup>, Marwa Rashad Salem<sup>1\*</sup>

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## Abstract

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**Keywords:** Sexually transmitted infection; Knowledge; Attitudes; Reproductive age; Egypt

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**OBJECTIVES:** The current study was conducted to assess the effect of an educational intervention on knowledge status and attitudes toward sexually transmitted infections (STIs) in a sample of women in reproductive age.

**METHODS:** One group quasi-experimental study was conducted at one primary health care center in Egypt; included 200 women selected by systematic sampling method. Health education intervention was designed and implemented to fill the knowledge gap revealed in pre-test in relation to prevention, early detection and STIs treatment.

**RESULTS:** The results revealed that knowledge about types, modes of transmission and causative agents of STIs, symptoms and complications of STIs, and prevention and treatment increased in post-test ( $p = 0.001$ ), with significant increase of total knowledge score in post-test ( $p = 0.001$ ). The attitudes toward STIs were also improved at post-test compared to pre-test.

**CONCLUSION:** The study reflected the need for implementing educational programs to improve STIs' knowledge and increasing women's readiness for STIs screening.

## Introduction

Sexually transmitted infections (STIs) have been recognized for years as a major public health problem especially in developing countries; with more than one million cases occurring daily worldwide and 500 million people living with curable STIs among adults aged 15–49 years [1]. However, reliable data on regional prevalence are limited and the best available estimates according to the World Health Organization indicated that about 10 million new cases occur annually in the Eastern Mediterranean Region [2]. In Egypt, the prevalence and incidence of STIs remained largely unknown because disease surveillance system has been markedly neglected [3].

Few countries in the EMR have developed a comprehensive national strategy for prevention and control of STIs, aiming for the achievement of the Millennium Development Goals and to prevention and control of HIV [4]. However, interventions are lacking evidence-based effective public health approaches, as recommended in the global control strategy. In 2015, the Egyptian government is paying great attention to

achieve the Sustainable Development Goals. This is expressed in "Strategy for Sustainable Development–Egypt Vision 2030." To be effective, national strategies should be translated into actions that reach communities, families, and individuals at grass roots [5].

In developing countries, STIs control programs often fail to achieve their goal due to the conservative nature of the societies shaped by the cultural, religious, and social taboos which leave women too shy to express their reproductive health needs or seek health services [6]. In addition, STIs are often left undiagnosed and untreated due to lack of knowledge on one hand and the deficiency of health care facilities providing appropriate and timely care on the other [7], [8].

In Egypt, there is paucity of studies assessed the knowledge status, the attitudes, and the safe sex practices for STIs prevention especially among those suffering health inequality namely women and adolescents [9]. Most of the available studies focused on HIV with negligence of other STIs or merely assessing their prevalence [10]. We hypothesized that an educational intervention about STIs may increase the knowledge of

# Letter to the Editor: Burnout Management among Health Care Workers in the Age of Coronavirus Disease-19

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## Abstract

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**AIM:** We aimed to understand the early warning signs and symptoms of occupational burnout as red flags among health care workers during the COVID-19 pandemic.

**METHODS:** Based on the suggestions of the International Federation of Red Cross and Red Crescent Societies [8], health-care providers need to be trained to increase three components of resilience across the three levels of individual, team, and organization so that they can optimally manage their psychological responses to catastrophes.

**RESULTS:** It seems that both targeted individual and organizational strategies are critical for the overall wellness of health care workers during the COVID-19 pandemic.

**CONCLUSION:** Health care workers experience high levels of burnout during the COVID-19, which warrants attention and support from health policy-makers and practitioners. Current evidence demonstrated that health-care staff could gain significant benefits from interventions to modify burnout syndrome, especially from organization-directed interventions.

## To the Editor,

The 2019 coronavirus disease (COVID-19) crisis has placed a heavy physical and psychological burden on health care workers worldwide. Although the recent focus has been primarily on expanding treatment options and vaccines, the psychological well-being of health-care employees has received less attention. Occupational burnout, as a serious consequence of the COVID-19 pandemic, refers to the experience of fatigue for a long time and reduced levels of motivation and interest in the job, yielding decreased work productivity [1]. This clinical condition results from an excessive effort in the workplace and a lack of opportunities for recovery. Further, the available evidence has revealed that stressful jobs are more likely to cause occupational burnout. In major pandemics, including COVID-19, health-care providers and professionals often experience higher than average workloads, longer shifts, strict organizational regulations, less time to cope with occupational hazards, sleep deprivation, disruptions of work-life balance, limited supportive resources, and grief caused by multiple losses [1], [2], [3]. These challenges often lead to emotional exhaustion, as feelings of physical and mental depletion caused by the work environment. Moreover, cynicism following emotional exhaustion may cause individuals to

experience job dissatisfaction and a sense of detachment from their work. Furthermore, a diminished sense of personal accomplishment (inefficacy) affects the emotional well-being of individuals. In such cases, people feel work productivity incompetence despite reaching achievements. Moreover, many health-care professionals may not be prepared to deal with COVID-19 patients due to their limited knowledge about severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection and lack of specific treatment protocols. Fear of autoinoculation and worry about the possibility of transmitting the SARS-CoV-2 infection to loved ones or others can also deprive them of their social support network due to self-isolation [1]. Nonetheless, it is worth noting that occupational burnout represents a slow and creeping process in many cases, making it difficult to observe its transition to a critical health condition for relevant therapeutic interventions [4]. Hence, it is necessary to understand the early warning signs and symptoms of occupational burnout as red flags among health care workers during the COVID-19 pandemic (Table 1).

Regarding management of occupational burnout, there is often no clear division between treatment and prevention. According to recent studies [5], [6], resilience, coping strategies, and the intolerance of uncertainty may be the important variables for



# Assessment of Psychological Distress among the General Public in Saudi Arabia during the Coronavirus Disease-19 Pandemic

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**BACKGROUND:** Coronavirus disease (COVID-19) and its preventative measures have disrupted people's day-to-day lives and jobs and consequently had an impact on their health and well-being. Studies have revealed high levels of depression, anxiety, and sleep disorders.

**AIM:** The main aim of this study was to determine the prevalence of psychological distress among the general public during the COVID-19 pandemic. In addition, it aimed to determine the characteristics of highly susceptible population.

**METHODS:** A prospective cross-sectional study using an online self-administered questionnaire gathering sociodemographic information and using the Kessler scale, which measures psychological distress. A total of 1058 people agreed to participate in the study and completed the questionnaire.

**RESULTS:** The study findings showed that 48.6% ( $n = 514$ ) of the study's respondents were psychologically distressed, that is, either in the high or very high distress category. Significantly higher ratings of psychological distress were observed among female participants, younger adults, those who self-reported poor health status, single persons, students, and individuals with caring responsibilities, and those who have no access to a private outdoor space. This distress was also found among those who have been in close or indirect contact with an individual with confirmed COVID-19 infection,  $p < 0.05$ .

**CONCLUSION:** Psychological distress has been widely prevalent among the general public in Saudi Arabia during the COVID-19 pandemic. The Saudi government and the health authorities should pay special attention to the highly susceptible population and implement effective strategies to preserve and improve the mental health and well-being of these individuals.

## Introduction

The WHO declared the 2019 coronavirus disease (COVID-19) outbreak to be a pandemic on March 1, 2020, following the rapid spread worldwide of the novel virus [1].

Governments around the world issued preventative measures to control the pandemic [2]. The Saudi government started implementing similar emergency precautionary policies as the outbreak continued to evolve. Those policies included social distancing, for example, the lockdown of some cities, suspension of the operations of many government authorities, banning of social gatherings in public places, the establishment of national quarantine for individuals, suspension of the operations of all shopping malls and local markets, as well as suspension of both domestic and international flights. The land borders between the country and all neighboring nations were restricted to commercial traffic only. Other management policies affected Islamic practice, for example, prayers in mosques, which were prohibited, as were visiting the religious sites in Medina and Mecca, and performing pilgrimages, that is, Hajj and Umrah [2].

The Ministry of Education announced the suspension of in-class teaching and learning and the temporary closure of all educational institutions around the Kingdom [2].

By June 21, 2020, all curfews were lifted through a three-phase program, except for social distancing and mask wearing throughout the country.

COVID-19 and its preventative measures disrupted people's day-to-day lives and jobs and consequently had an impact on their health and well-being. Studies have revealed high levels of depression, anxiety, and sleep disorders [3].

Psychological distress during the COVID-19 pandemic has been evaluated on a national level in several countries. A nationwide survey in China revealed that participants felt isolated due to the strict quarantine and approximately one-third of participants had other psychological issues, such as panic disorder, anxiety, and depression [3]. A nationwide Italian online survey concluded that for females, negative affect and detachment were among the factors that resulted in higher levels of depression, anxiety, and stress. Being previously diagnosed with a medical condition or being exposed to stressful experiences was found

# Comparison of Emergency Medical Services Duration amid Routine Service for COVID-19 Patients

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## Abstract

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**BACKGROUND:** Concerning the COVID-19 outbreak in Thailand, the number of patients has been increasing. Emergency medical services (EMS) operating duration differs from normal services due to equipment preparation, number of personnel, and on-board ambulance procedures. Notably, there have been no studies examining EMS duration regarding COVID-19 patients.

**AIM:** The aim of this study was to compare the EMS time for COVID-19 patients and routine services.

**METHODS:** This cross-sectional study was conducted in a tertiary university hospital in Khon Kaen, Thailand. Information gathering was carried out by employing the Srinagarind Hospital EMS database throughout January 1, 2020, and February 10, 2021.

**RESULTS:** A total of 2420 EMS operations were examined, of which five tested positive for COVID-19 (0.21%). The mean age of the COVID-19 patients was  $35.6 \pm 7.2$  years, with the activation interval for COVID-19 and routine services at  $64.20 \pm 10.14$  and  $1.42 \pm 0.42$  min, respectively ( $p < 0.001$ ). The on-scene time for COVID-19 and routine services was  $3.20 \pm 0.44$  and  $5.20 \pm 2.20$  min, respectively.

**CONCLUSIONS:** EMS operating time amid the activation interval for COVID-19 patients was significantly longer than in the normal group. However, on-scene time for COVID-19 patients was less time than in normal operations.

## Introduction

With regard to the COVID-19 outbreak in Thailand, there has been a growing number of patients from the first outbreak in early 2020, to the second outbreak in 2021. Accordingly, it was discovered that the outbreak was associated with working in enclosed or congested locations such as food markets or large factories. In addition, a large number of those infected were found through proactive screening. In the case of screening for people at risk of COVID-19, focus on screening took place in communities with nearby sites, epidemic sites, or in the residences of infected individuals. Following a positive coronavirus reading, it is necessary to admit the patient to a hospital or field hospital [1], [2]. Subsequently, there comes a reliance on the operations of the emergency medical services (EMS) to perform their functions. Studies were conducted regarding the COVID-19 infection risk among EMS healthcare workers who were unaware of the risk of infection due to improper wearing of personal protective equipment [2], [3], [4]. Moreover, studies have

shown that procedures on-board ambulances are likely to change significantly [4], [5] especially procedures that produce aerosol gases – which may result in the service being altered [6]. Numerous studies have shown that phone calls for EMS have decreased during the COVID-19 epidemic, and the duration of telephone calls has also decreased [7], [8], [9], [10].

In a certain part of Khon Kaen City, which is located in the northeastern part of Thailand, roughly 450 km from Bangkok is another area where COVID-19 cases have been discovered. Studies have been conducted on the delivery of patients infected with COVID-19. Hence, it was revealed that there was very little published information from the hospital which affects hospital planning [10], [11], [12] in which the EMS operating process differs from normal services, that is, equipment preparation, number of personnel, and on-board ambulance procedures. In China, it was discovered that most patients sent to hospitals had mild symptoms [2], [7]. The most common pre-existing symptom is fever. Studies have shown that during a COVID-19 outbreak, as a result of said outbreak, the





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**HEALTH RESEARCH ETHICS COMMITTEE**

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**ETHICS COMMITTEE APPROVAL**

No : 224/UN30.14.9/LT/2020

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Limun Kota Bengkulu

The Health Research Ethics Committee states that the above protocol meets the principle outlined in the Declaration of Helsinki 2013 and therefore can be carried out.

The Health Research Ethics Committee has the right to monitor the research activities at any time.

The investigator (s) is/are obliged to submit :

- ☐ Progress report as a continuing review (state its due time)
- ☐ Report of any serious adverse events (SAE)
- ☒ Final report upon the completion of the study

  
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