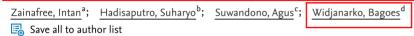




## Adolescent Riding Behavior During the COVID-19 Pandemic in Urban Area, Indonesia: A Crosssectional Study



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#### Abstract

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#### Abstract

Background: According to police reported crash, in 2020 there have been 510 road traffic accidents among adolescents aged 16-25 years. The problem is that although restrictions on social activities have been implemented, 9.80% of accidents have caused deaths in Semarang City. There were many factors that influence the occurrence of road traffic accidents; one of those is the poor knowledge about safe riding behavior. The aim of this study is to determine the factors that contribute to the occurrence of road traffic accidents in adolescents during the pandemic. Methods: This was a crosssectional study, collected data using an online questionnaire distributed to adolescents aged 15-20 years in Semarang City, Indonesia. It was distributed during February-April 2021. The data included participant's demographic information, riding behavior, and knowledge about safe riding. We analyzed using chi-square and logistic regression to determine the most influential factors. Results: The sample included 725 participants with a mean age of 17.4 years (SD=0.97); 260 (35.9%) males. We have found that gender was associated with the incidence of road traffic accidents (AOR=1.455, 95% CI [1.048-2.020], P=0.025) after adjusting for experience road safety education, vehicle type, and knowledge of safe riding. Conclusion: It is necessary to carry out Road Safety Education efforts to male students during the pandemic to reduce the incidence of traffic accidents. © 2021 Intan Z, et al.

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#### About Ethiopian Journal of Health Sciences

#### **Ethiopian Journal of Health Sciences**

The first issue of the Ethiopian Journal of Health Sciences, published by the College of Health Science of Jimma University, appeared in July 1990 with the title 'Bulletin of Jimma Institute of Health Sciences'. The journal used to appear twice a year until July 2007. Thereafter, it used to be published trice a year until it became a quarterly publication in 2014. Since January 2016, it is appearing every other month. It is an open access journal available at <a href="https://www.ethjhealths.org">https://www.ethjhealths.org</a>. The journal publishes peer-reviewed articles related to Public Health and Medicine. The objectives of the journal are:

- To provide current scientific and technological information on health and related fields for informed planning and decision making.
- To contribute to the scientific knowledge and practices in medicine, public health and related fields by
  providing a formal means for researchers to share their scientific research works, observations and
  experiences.

#### **Historical Summary**

Hosted by Jimma University, the Ethiopian Journal of Health Sciences (EJHS) has been publishing peerreviewed articles on a range of topics pertaining to public health and medicine. EJHS has always aspired to: 1) provide current scientific and technological information on health and related fields for informed planning and decision making, and 2) contribute to the scientific knowledge and practices in medicine, public health and related fields by providing a formal means for researchers to share their scientific research works, observations and experiences.

The first issue of EJHS emerged in July 1990 under the former name of the journal, "Bulletin of Jimma Institute of Health Sciences". Since then, EJHS made several strides to reach scientists, academicians, policy makers and other readers or users. In its journey from then onwards, EJHS underwent several quantitative and qualitative transformations. From its commencement to 1995, it appeared biannually with its initial name mentioned above. In those years, EJHS was characterized by changes in form, cover colour, contents and manuscript sources. Its form changed from A-5 to A-3 and its cover colour from yellow to white and then to blue. Its contents also varied significantly in quantity and quality. Yet, almost all the manuscript contributors during the stated period were from the then Jimma Institute of Health Sciences.

The next stage covers the years of 1996-2007 when EJHS suffered from sluggish development. The one noteworthy change then was the change in name from "Bulletin of Jimma Institute of Health Sciences" to "Ethiopian Journal of Health Sciences". This coincided with the emergence of a full-fledged Jimma University. However, the biannual appearance, the A-5 size format and the blue colour were maintained. Besides, the quantity, the diversity and the quality of the articles published in each issue did not exhibit noticeable changes. Luckily, few authors from other parts of Ethiopia began contributing manuscripts although international contributions were yet to happen.

EJHS registered a commendable development from 2008 to 2013. The first two fundamental changes in this period were the change in format from A-5 to A-3 and the growth of the journal from biannual to triannual publication. The articles published in successive issues also improved substantially in quantity and quality. In 2008, EJHS joined African Journals Partnership Project (AJPP), which is funded by the US National Institute of Health/National Library of Medicine (NLM). With AJPP support, the Editor-in-Chief of EJHS became member of the Council of Science Editors. AJPP also helped EJHS partner with Annals of Internal Medicine published by American College of Physicians. In 2009, EJHS launched its own website where all publications are uploaded for open access.

In 2010, it began using ScholarOne-Manuscript Central software for manuscript management. This resulted in the termination of the submission of manuscripts in print copies. In the same year, EJHS it joined Committee for Publication Ethics (COPE), while it was indexed on PubMed Central, African Journal Online (AJOL) and EBSCO in 2011. In the end of 2012, it was indexed on MEDLINE. Although EJHS did not win the competition to become member of International Committee of Medical Journal Editors (ICMJE) in 2011, it succeeded in 2013 as a result of which the Editor-in-Chief joined this international group. The international involvement helped to considerably increase the visibility of EJHS. The remarkable growth in the number of readers and the massive submission of manuscripts from all parts of the world witnessed this phenomenon. This in turn demanded an increase in the frequency of publications.

In response to this situation, EJHS evolved into a quarterly publication during its 24th anniversary in 2014. The continued increase in manuscript inflow still necessitated upgrading EJHS into a journal which



# **EJHS**Ethiopian Journal of Health Sciences

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#### ORIGINAL ARTICLE

# **COVID-19** in WHO African Region: Account and Correlation of Epidemiological Indices with Some Selected Health-related Metrics

Henshaw Uchechi Okoroiwu<sup>1,2\*</sup>, Christopher Ogar Ogar<sup>2</sup>, Dennis Akongfe Abunimye<sup>3</sup>, Ifeyinwa Maryann Okafor<sup>2</sup>, Ikenna Kingsley Uchendu<sup>3</sup>

#### OPEN ACCESS

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#### **ABSTRACT**

BACKGROUND: The coronavirus disease 2019 (COVID-19) is a highly contagious and pathogenic viral disease caused by severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2). Since it was first reported in Wuhan, China, it has spread across the continents. The study is aimed at describing epidemiological indices of COVID-19 as reported by the World Health Organization and to examine correlations with some country specific measures of general health status.

METHODS: Data from the WHO African region were extracted from World Health Organization, Global Health Security Index, Worldometer and World Bank databases, as at September 8, 2020. Other epidemiological indices were computed for the various countries. Epidemiological indices of COVID-19 were correlated with some selected health related metrics: Global Health Security index (GHSI) and current health expenditure (CHE). Pearson correlation was used to access the relationship between the health-related metrics and epidemiological indices.

RESULTS: Forty-seven (47) countries belonging to the WHO African region were evaluated. A total of 1,086,499 confirmed cases and 23,213 deaths were recorded giving a fatality rate of 2.1%. South Africa recorded the highest cumulative confirmed cases as well as deaths (Cases: 639,362; Deaths: 15,004) while Seychelles (Cases:135) and Eritrea/Seychelles (Deaths:0) had the least cumulative cases and deaths (135;0 and 330;0), respectively. South Africa recorded the highest attack rate (1127.67/100,000) while Republic of Tanzania recorded the least attack rate (0.78/100,000). The highest case fatality rate/ratio was observed in Chad (7.60%) while the least value was observed in Seychelles (0.0%). France was the most common country involved in travel history of index cases. Sporadic transmission was recorded in 3 countries, 9 countries had cluster of cases while the rest had community transmission. The first WHO African region country to record COVID-19 case was Algeria, while Comoros was the last. Significant positive correlation was found between COVID-19 case number/deaths and Global Health Security Index.

CONCLUSION: The WHO African region has had its own share of the pandemic with all the countries being affected. The trio of cluster cases, sporadic and community transmission were recorded with majority being community transmission.

KEYWORDS: COVID-19, SARS-Cov-2, COVID-19 in Africa, Coronavirus

#### ORIGINAL ARTICLE

# Effect of COVID-19 on the Number of CT-scans and MRI Services of Public Hospitals in Iran: An Interrupted Time Series Analysis

Mohammad Heydarian<sup>1</sup>, Masoud Behzadifar<sup>2\*</sup>, Christos V. Chalitsios<sup>3,4</sup>, Mohammad Keshvari<sup>5</sup>, Roodabeh Omidifar<sup>5</sup>, Mahboubeh Khaton Ghanbari<sup>6</sup>, Hasan Abolghasem Gorji<sup>6</sup>, Jude Dzevela Kong<sup>7</sup>, Jianhong Wu<sup>7</sup>, Nicola Luigi Bragazzi<sup>7,8</sup>

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Citation Mohammad Heydarian, Masoud Behzadifar, Christos Mohammad Chalitsios, Keshvari, Roodabeh Omidifar, Mahboubeh Khaton Ghanbari, Hasan Abolghasem Gorji, Jude Dzevela Kong, Jianhong Wu, Nicola Luigi Bragazzi. Effect of COVID-19 on the Number of CT-scans and MRI Services of Public Hospitals in Iran: An Interrupted Time Series Ethiop J Health Analysis. 2021;31(6):1109.

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<sup>7</sup>Laboratory for Industrial and Applied Mathematics (LIAM), Department of Mathematics and Statistics, York University, Toronto, Canada.

#### **ABSTRACT**

BACKGROUND: In February 2020, the Ministry of Health and Medical Education in Iran announced the first case of COVID-19. The aim of this study was to investigate the impact of COVID-19 on the number of CT-Scans and MRI services in public hospitals in western Iran.

METHODS: We collected CT-scans and MRI services data from 18 public hospitals via Vice-Chancellor Office, Lorestan University of Medical Sciences from January 2017 to February 2021. Interrupted time series analysis (ITSA) was conducted to assess the impact of COVID-19 on CT-Scans and MRI services. More specifically, ITSA was conducted using ordinary least squares regression with the number of CT-Scans and MRI services per 1,000 registered persons per month as dependent variable.

RESULTS: At the beginning of the observation period, the monthly rate of CT-Scans was constant (p for trend = 0.267) at 291.9 (from 95%CI 240.5 to 343.4) per 1,000 registered patients. The first case of COVID-19 coincided with an abrupt increase by 211.8 (from 95%CI 102.9 to 320.7) per 1,000 patients. Thereafter, the trend of CT-Scans did not change (p=0.576) compared to the pre-pandemic period. The rate of MRI services was 363.5 per 1,000 per registered patients per month (P = < 0.0001) with a slightly decreasing trend (coefficient=-5; 95%CI, -6.9 to -3.1).

CONCLUSION: The findings of this study showed that crises such as COVID-19 can affect the service delivery process. Health policymakers and decision makers should work to prevent potential reductions in health care during events such as COVID-19.

KEYWORDS: COVID-19, CT-Scans, MRI, Interrupted time series, Iran, Health services

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