



Opera

ISSN: 1657-8651

ISSN: 2346-2159

Universidad Externado de Colombia

Yasheva Smith, Aieka
CONTESTED BODIES AND DELAYED DECISIONS:
ATTITUDES TO COVID-19 VACCINES AMONG JAMAICANS
Opera, no. 32, 2023, January-June, pp. 185-207
Universidad Externado de Colombia

DOI: <https://doi.org/10.18601/16578651.n32.10>

Available in: <https://www.redalyc.org/articulo.oa?id=67575199010>

- How to cite
- Complete issue
- More information about this article
- Journal's webpage in redalyc.org

UAEM  redalyc.org

Scientific Information System Redalyc
Network of Scientific Journals from Latin America and the Caribbean, Spain and
Portugal

Project academic non-profit, developed under the open access initiative

CONTESTED BODIES AND DELAYED DECISIONS: ATTITUDES TO COVID-19 VACCINES AMONG JAMAICANS

AIEKA YASHEVA SMITH*

Abstract

Coronavirus Disease 2019 (COVID-19) has been accompanied by numerous factors which have adversely affected Small Island Developing States (SIDS). Despite several COVID-19 vaccination campaigns and the number of individuals who have been afflicted by, or died from, contracting the virus, many Jamaicans have delayed their vaccination against COVID-19. This study investigates the factors that have shaped the attitudes of Jamaicans towards COVID-19 vaccines. Its findings are based on content analysis of Jamaican newspapers (N=200), including columns, editorials, and news stories published in the online editions of two of the country's leading publications (The Jamaica Gleaner and the Jamaica Observer). The study finds that several factors shape the attitudes of Jamaicans

towards COVID-19 vaccines. These include the potential side effects of COVID-19 vaccines, personal choice, perception of the pandemic, insufficient knowledge regarding the efficacy of the vaccines, religious beliefs, and distrust of the Jamaican government and health authorities. The study highlights that for SIDS, like Jamaica, which are characterised by fragile economies and ailing public health care systems, vaccine hesitancy is a potential barrier to overcoming some of the challenges linked to the current pandemic.

The study points to the critical need to improve the COVID-19 vaccination uptake among Jamaicans. Understanding the specificities concerning vaccine hesitancy will allow the Jamaican government and healthcare providers to better organise public sensitisation campaigns to address the concerns of the unvaccinated in Jamaica.

* PhD Government. The University of the West Indies, Mona Campus. (Jamaica) W.I. Lecturer. Department of Government. The University of the West Indies, Mona Campus Kingston 7, (Jamaica) W.I. [aieka_smith@yahoo.com or aieka.smith02@uwimona.edu.jm]; [https://orcid.org/0000-0001-6529-188X]

Recibido: 8 de junio de 2022 / Modificado: 4 de agosto de 2022 / Aprobado: 18 de agosto de 2022

Para citar este artículo:

Smith, A. Y. (2022). Contested Bodies and Delayed Decisions: Attitudes to COVID-19 Vaccines among Jamaicans. *Opera*, 32, pp. 185-207.

DOI: <https://doi.org/10.18601/16578651.n32.10>

Key words: COVID-19; vaccination; Jamaica; vaccine hesitancy.

INSTANCIAS DE DISPUTA Y DECISIONES DEMORADAS: ACTITUDES DE LOS JAMAICANOS ANTE LAS VACUNAS COVID-19

Resumen

El coronavirus de 2019 (covid-19) ha venido acompañado de numerosos factores que han afectado negativamente a los pequeños Estados insulares en desarrollo (PEID). A pesar de varias campañas de vacunación contra el covid-19 y del número de personas que han sufrido o han muerto por haber contraído el virus, muchos jamaicanos han retrasado su vacunación. Este estudio investiga los factores detrás de las actitudes de los jamaicanos hacia las vacunas contra el covid-19. Sus conclusiones se basan en el análisis del contenido de los periódicos jamaicanos (N=200), incluyendo columnas, editoriales y noticias publicadas en las ediciones en línea de dos de las principales publicaciones del país (*The Jamaica Gleaner* y *Jamaica Observer*). El estudio concluye que son varios los factores que determinan la actitud de los jamaicanos hacia las vacunas covid-19, entre ellos se encuentran sus posibles efectos secundarios, la elección personal, la percepción de la pandemia, el insuficiente conocimiento sobre la eficacia de las vacunas, las creencias religiosas y la desconfianza en el gobierno jamaicano y las autoridades sanitarias. El estudio subraya que para los PEID, como Jamaica, que se caracterizan por tener economías frágiles y sistemas de atención sanitaria pública deficientes, la indecisión sobre las vacunas es un

obstáculo potencial para superar algunos de los retos relacionados con la pandemia actual.

El estudio señala la necesidad crítica de mejorar la aceptación de la vacuna covid-19 entre los jamaicanos. La comprensión de las especificidades relativas a la indecisión en la vacunación permitirá al gobierno jamaicano y a los proveedores de atención sanitaria organizar mejor las campañas de sensibilización pública para abordar las preocupaciones de los no vacunados en Jamaica.

Palabras clave: covid-19; vacunación; Jamaica; reticencia a vacunación.

INTRODUCTION

COVID-19 originated in Wuhan, China, in 2019, and rapidly spread across the world. It has aggravated issues like poverty, unemployment, and inequality, all of which have burdened Jamaica since gaining its independence. Although vaccines are controversial, they have the potential to save lives and reduce the prevalence of diseases. In Jamaica, there are many barriers to vaccination uptake and unvaccinated individuals constitute 98% of COVID-19-related deaths (Williams, 2022).

The Caribbean Community (CARICOM) is a prime beneficiary of vaccine diplomacy. Member states like Jamaica have received donations of COVID-19 vaccines from their bilateral partners, for example, India, China, and the United States of America (USA). On March 15, 2021, Jamaica received 14,400 vaccines through the COVAX Facility which is a global effort between the Coalition

for Epidemic Preparedness Innovations (CEPI), Gavi, the Vaccine Alliance Gavi, the United Nations Children's Fund (UNICEF), the Pan American Health Organization (PAHO) and the World Health Organization (WHO) (PAHO, 2021). These donations were emblematic as Jamaica became the first country in the Caribbean to receive COVID-19 vaccines.

Advances in research and technology have allowed COVID-19 vaccines to be developed at a rapid pace. In 2021, some 66% of the world's population received at least one dose of a COVID-19 vaccine, and only 16.2% of people in low-income countries received at least one dose (Mathieu et al., 2021). Three types of COVID-19 vaccines are approved for use in Jamaica, namely AstraZeneca, Pfizer, and Johnson & Johnson. These are available to individuals over 12 years old.

Vaccine hesitancy refers to the "delay in acceptance or refusal of vaccination despite the availability of vaccination services" (MacDonald, 2015, p.4161). This study investigates the factors that have shaped the attitudes of Jamaicans towards COVID-19 vaccines. Despite the availability of vaccines, Jamaica, and by extension, the Caribbean region, struggles to increase the COVID-19 vaccination rates among citizens. Jamaica, like many SIDS, continues to confront severe challenges and threats owing to the pandemic. COVID-19 has brought a gloomy tune of death, illness, disruption, and psychological and socioeconomic challenges upon the shores of many countries across the globe. For Jamaica, it has undoubtedly hampered the ability of the Jamaican government to efficiently harness its scarce resources to meet the needs of its citizens.

A dynamic within the globalization debate, specifically related to migration and the spread of diseases, unduly exposes SIDS to an environment and issues that they are inherently incapable of controlling and whose outcomes heighten their vulnerabilities. Within this context, the realities of a harsh global economic environment, in one way, have reshaped Jamaica's foreign policy options and ostensibly given stronger convictions regarding the potential of post-pandemic South-South cooperation.

Globalization has been restructuring the discussion concerning the media as an agent of socialization and a tool for sustaining a healthy democracy (Aalberg & Curran, 2012; Siwathomchai, 2021). Mao and Richter (2014) believe that "the crucial players in the development of public health policy are influenced by the media" (p.1). Newspapers provide a key source of information on domestic, regional, and international phenomena.

The media serves multiple roles that include shaping public opinion, building awareness, surveillance, agenda-setting, and influencing attitudes. Thus, based on these underlying reasons coupled with the ongoing challenges posed by COVID-19 and low rates of vaccinations among Jamaicans, the media warrants special attention (Valenzuela & McCombs, 2019; Lupton, 2012; Larson et al., 2013). The central idea advanced here is that in Jamaica, "as breakthrough infections of fully vaccinated persons with new variants of Sars CoV2 occur and are reported widely in the media, it will feed vaccine effectiveness concerns" (Bailey & McCaw-Binns, 2022, p.462).

COVID-19 is a relatively new issue and research in that area is ongoing. While it is in an embryonic stage, there is a steadily growing body of work on COVID-19 and its impacts on Jamaica (Amour, Robinson, & Govia, 2020; Ricketts, 2020; Byron et al., 2021; Vasciannie, 2021; Thame, 2021; Blackman, 2021; James et al., 2021). There is a dearth of studies on two broad areas: (1) the factors that shape the attitudes of Jamaicans towards COVID-19 vaccines and (2) vaccine hesitancy in Jamaica (Bourne, 2022; Bailey & McCaw-Binns, 2022). Notwithstanding the gaps in research, evidence-based research will be important for SIDS to utilize to inform the design of appropriate responses and management strategies. The hope is that this will allow them to deal with the spread of diseases, with the aim of directing services to assist the most vulnerable groups.

This present study contributes to the literature on COVID-19 and the vulnerability of SIDS in the international system. It is also a well-timed intervention in the limited literature, to date, in Caribbean International Relations and Political Science concerning the management of health crises and the development of sustainable healthcare systems. The study aims to build on existing research on COVID-19 to enhance our understanding of SIDS as actors in a tightly constrained environment.

BACKGROUND: VACCINES

Vaccines are regarded as one of the most cost-effective public health interventions that

can be used to lower the rates of disease and mortality (Majid & Ahmad, 2020, p.1762). Worryingly, “the coronavirus disease 2019 (COVID-19) pandemic infected more than 158 million people and caused more than 3.2 million deaths worldwide as of May 11, 2021” (Liang et al., 2021, p. 1). Jamaica has a legacy of eradicating diseases through vaccines, yet there is some ambivalence among sections of its population concerning the acceptance of those for COVID-19.

To set the tone for this article, it is important to understand Jamaica’s history of vaccination, which the researcher argues occurred in four phases. Between 1800 and 1940, life expectancy at birth in Jamaica stood at 38 years (Riley, 2005). Vaccination-preventable diseases like pneumonia, and measles, were the leading causes of death in the country at that time (Preston, 1980). During the 1950s, there were outbreaks of polio and measles which vaccinations were used to control (Ashley & Bernal, 1985). The life expectancy of the population also grew to around 53 years at that time (Caldwell, 2007). Jamaica continued to record stellar achievements with its rolling out of vaccines and by the second phase, 1970-1980, a school immunization programme was in full effect (Bronte-Tinkew & Dejong, 2005). A national polio vaccination campaign also targeted individuals under 30 years old. The Expanded Programme on Immunization (EPI) was established in Jamaica in September 1977 and through its efforts, many young Jamaicans have been afforded the opportunity to enjoy their childhood without the threat of preventable diseases (WHO, 1992).

In the fourth phase of Jamaica's vaccination programme: 1990 to 2000, average immunization coverage increased to 89 % for Jamaican children under 2 years old (WHO, 2009). With successful immunization programmes, Jamaica's last recorded cases of polio, diphtheria, and new-born tetanus were in 1982, 1995, and 2001 respectively (Jamaica Information Service (JIS), 2012).

In Jamaica's pandemic phase, as Bailey and McCaw- Binns (2022) write, "The goal of vaccinating at least 65% of the population by 31st March 2022 has not been met with under 25% of the population fully vaccinated at 31st March 2022" (p.461; See also Ministry of Health & Wellness Jamaica, 2022). The discussion concerning the attitudes towards COVID-19 vaccines among Jamaicans and Jamaica's ability to respond to the pandemic must be situated in two contexts. Firstly, some major illnesses prevalent among Jamaicans are diabetes, heart disease, sickle cell, HIV, and cancer (Alleyne et al., 1989), which place an existing strain on hospital resources. Secondly, successive International Monetary Fund loan conditionalities have crippled the country's fragile public health care sector. This problem has also resulted in chronic problems regarding doctor-to-patient ratios, shortages of hospital beds, inadequate equipment, and the worrying trend of the haemorrhaging of healthcare professionals who seek better opportunities in more advanced countries (Edwards et al., 2021; Wint, 2002).

In the first week of November 2021, Jamaica's Minister of Health and Wellness, Dr. Christopher Tufton, announced that "one

million COVID-19 vaccine doses were administered" in the country (JIS, 2021). Currently, Jamaica has one of the lowest rates of fully vaccinated individuals in the Anglophone Caribbean (Dunkley-Willis, 2022). Additionally, in June 2022, Jamaica reported some "301 new infections on average each day, 21% of the peak — the highest daily average reported on January 15" (Reuters, 2022). Secondly, "there have been 138,110 infections and 3,068 coronavirus-related deaths reported in the country since the pandemic began" (Reuters, 2022). This growing number of infections and COVID-19 deaths has been troubling for citizens, public and private health care providers, and officials at the country's Ministry of Health and Wellness. Consequently, Jamaica has utilized a plethora of strategies to deal with COVID-19.

Some of the measures used by Jamaica to tackle the spread of COVID-19 include interventions such as public sensitization campaigns, making vaccines available at fixed and mobile facilities across the country, appointing vaccination ambassadors, and incentivizing Jamaican citizens aged 60 years and older who have been fully vaccinated through a grant of JA\$10,000. There are still challenges associated with widening vaccination uptake. There is also the contending view that Jamaica's vaccination strategy, and by extension its COVID-19 responses, have not fulfilled their desired outcomes because, to date, under 26% of Jamaicans out of a population of roughly 3 million people are fully vaccinated (JIS, 2022). The Health Belief Model will be used to explain Jamaica's low rate of COVID-19 vaccination.

Theoretical framework: Health Belief Model

There are multiple theories and models that have been devised to explain, describe, and predict an individual's actions with a view to understanding their attitudes and behaviours towards health. This study investigating the attitudes of Jamaicans to COVID-19 vaccines is anchored by the Health Belief Model. Health behaviour is influenced by personal beliefs regarding disease and the strategies that exist to lower its manifestation or occurrence (Hochbaum, 1958). The Health Belief Model assumes that there are complex factors that shape people's actions, including their perception of susceptibility and perception of severity. Based on the foregoing observations, this model is useful in exploring the perceptions of Jamaicans towards COVID-19 vaccines which in turn influence their hesitance or willingness to become vaccinated. It can also be used to shed light on Jamaica's low rate of COVID-19 vaccination uptake and is useful to understand public risk perception considering the growing number of COVID-19-related deaths both worldwide (Bavel et al., 2020) and specifically in Jamaica (Kim et al., 2021).

According to Tao et al. (2021) "The health belief model included five dimensions that might influence individuals' health behaviours, namely perceptions of susceptibility, severity, barriers, benefits, and cues to action" (p.2378). Dryhurst et al. (2020) reinforce the point that varying contextual and personal factors such as one's experience with COVID-19, learning about it from different networks (friends and family), trust in science and government, and one's awareness of government strategy

are among the factors that contribute to risk perception.

In keeping with the Health Belief Model, the attitudes of Jamaicans towards COVID-19 vaccines are informed by people's environmental experiences and contextual factors like age and gender which influence their COVID-19 vaccination intentions.

LITERATURE REVIEW: ATTITUDES TOWARD COVID 19 VACCINES

On March 10, 2020, Jamaica reported its first case of COVID-19 (Amour, Robinson, & Govia, 2020). The victim was identified as a Jamaican female who travelled to the country from the United Kingdom. Interestingly, within the next twenty-four hours of this occurrence, on March 11, the World Health Organization (WHO) moved to declare COVID-19 as a pandemic (Ricketts, 2020). Jamaica, like its Caribbean counterparts, was not spared from the torrents unleashed by COVID-19. Subsequently, "in the weeks preceding the [WHO's] declaration, multiple countries proactively implemented various levels of mass physical distancing combined with other measures to interrupt COVID-19 transmission" (Lane et al., 2021, p.2).

Jamaica's first recorded case of COVID-19 later set in motion several responses such as lockdowns, stay-at-home-orders, remote working, mask-wearing, shuttering of schools, and surveillance, which resulted in increased levels of anxiety and fear that Jamaicans had not anticipated. For developing countries with existing economic and developmental challenges such as poverty, crime,

unemployment, and declining revenue streams from sectors like entertainment and tourism, COVID-19 has unleashed issues over the last two years that have exacerbated their struggle to stay afloat. It has also harmed some of the poorest individuals in society.

In their study of marginalized indigenous communities, Goha et al. (2021) offer a startling revelation that “the COVID-19 pandemic is a reminder or wake-up call of how a more equitable distribution of money, power, and resources at global, national and local levels benefits all” (p.207). SIDS, by virtue of how they are incorporated into the international system, are bound to face serious consequences from the processes of globalization (Lowitt et al., 2015; Briguglio et al., 2021). The influence of powerful countries, like the USA, also continues to compromise the sovereignty of small islands in the Caribbean.

COVID-19 has not only altered the course of life for Caribbean people. It has produced “unprecedented effects on the livelihood and health of people across the globe” (Stubbs et al., 2021, p.1). Presently, the coronavirus is a major threat to global public health (Marfe, Perna & Shukla, 2021). Worldwide, efforts to control the spread of SARS-CoV-2 have achieved varying degrees of success (Mallard, et al. 2021). Understandably, “responses to the pandemic have varied not only from country to country, but within countries and their constituent subpopulations – geographically, socially and ethnically” (James et al., 2021, p.2). In countries like India, which experienced a spike in COVID-19 cases in 2021, hospital services have been burdened and there has been a shortage of medical oxygen supplies

(Bernal et al., 2021). Jamaica has experienced a similar fate. This is amplified by the reality of having large numbers of people contracting the coronavirus and the economic limitations stemming from the position that the country occupies in the international arena.

Countries have experimented with various strategies to manage the spread of COVID-19. Several factors compound the task of managing COVID-19 patients in developing countries such as weak infrastructure, the uneven rate of doctors to patients, scarcity of intensive care unit beds and ventilators, limited health care budgets, little personal protective equipment, and the absence of local manufacturing capacity to create vital medical supplies and medications (Mezue et al., 2020; Miller et al., 2020). By extension, COVID-19 has other serious implications on sectors like education. Giannini (2020) asserts that school closures paired with confinement had the most daunting impact on existing marginalized and vulnerable groups like girls, students with disabilities, and those living in poverty.

Multiple factors shape the attitudes of individuals in various countries towards the COVID-19 vaccines. These factors can be collapsed into five broad categories: socio-economic, political, environmental, cultural, and religious. Historically, the debate concerning the potential side-effects of vaccinations has received a high level of attention. Legal regulations warrant full disclosure of potential side effects of pharmaceutical drugs and vaccinations and, in their study of 2133 Egyptian medical students, Saied et al. (2021) found that most of the studied participants relayed concerns about the negative effects

and ineffectiveness of the vaccines. Some 73% of participants in that study also voiced their concerns about the limited information available on the COVID-19 vaccine. Based on the analysis of the Twitter posts of citizens in India, Sv, Tandon, & Hinduja (2021) found that some of the most prominent negative attitudes of Indians towards the COVID-19 vaccine are fear of death, long-term implications, and the possible risk of taking the vaccine.

The internet has allowed information to be disseminated and shared across the globe at blazing speeds. Information about vaccines and individual experiences with vaccines is widely circulated (Banerjee & Meena, 2021). Social media posts and videos showcasing stories about people developing major illnesses in the post-vaccine administration period have fuelled vaccine hesitancy which can potentially lead to low vaccination rates (Kim et al., 2021). Allington et al. (2021) found that high dependence on social media for information and low perception of the risk from COVID-19, coupled with low trust in government, scientists, and doctors were among the factors linked to COVID-19 vaccine hesitancy in the UK.

Personal convictions are important in informing decisions and shaping people's attitudes towards COVID-19 vaccines. In their study of the willingness of health care workers to take the COVID-19 vaccination, Kumar et al. (2021) uncovered wide-ranging justifications for vaccine hesitance, including vaccine safety concerns, anti-vaccination persuasions, personal choice, and waiting until others took the vaccine. Religious belief and various forms of religiosity can shape people's attitudes toward their health and COVID-19 vaccines

specifically (Aziz, Niazi, & Ghani 2022; Ng et al., 2022; Salam, 2021). Corcoran, Scheitle, and DiGregorio (2021) identify Christian nationalism as one of the leading predictors of COVID-19 vaccine hesitancy. Tackling misinformation about COVID-19 vaccines, insufficient knowledge regarding the efficacy of COVID-19 vaccines, and unease about the safety of same are fundamental ingredients in improving people's attitudes about their role in ending the pandemic.

Many Jamaicans are sceptical of the COVID-19 vaccine and have delayed becoming vaccinated. Dr. Christopher Tufton, Jamaica's Minister of Health and Wellness, underscores the point that "health promotion and communications machinery will be increased to further promote trust towards the vaccine, eliminate myths and misinformation, supply truthful and accurate information about vaccination and gain public trust in the vaccination strategies to be employed." (qtd in Linton, 2021). Bailey and McCaw-Binns (2022) have found that among the most common reasons among Jamaicans for delaying the COVID-19 vaccine is their conviction that it does not avert virus transmission and conspiracy theories circulated on social media. Additionally, it may appear that "the local trusted scientific community has not been effective in educating the population about the nature of a Coronavirus, the dynamic nature of the pandemic and the corresponding changes in what is known and applied" (Bailey and McCaw -Binns, 2022, p.461).

Scholars and the medical community are divided about whether COVID-19 vaccines are useful in reducing the spread of the

coronavirus and lowering the morbidity and mortality rates among a country's population (Roberts et al., 2022; Mallow et al., 2022; Mehrotra et al., 2021). The safety, side effects, and the time that it took to develop the COVID19 vaccines have been at the centre of heated discussions. Paltiel (2021) observes the following:

"From the earliest stages of the coronavirus disease 2019 (COVID-19) pandemic, the development of safe and effective vaccines against severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2), the viral cause of COVID-19, has been widely considered an essential component of any strategy to control the virus, the disease, and its effects. Since the publication of the SARS-CoV-2 viral sequence on January 10, 2020, an unprecedented global collaboration among governments, vaccine manufacturers, and researchers have been mounted to develop COVID-19 vaccines" (p.42).

Gallagher et al. (2021) provide a compelling case that vaccines continue to be the most "promising solution" to slowing the spread of the coronavirus. Henry et al. (2021) conclude that "the currently available COVID-19 vaccines appear to be very effective in preventing severe complications and deaths from COVID-19 in adults of all ages" (p.151). Evans and Jewell (2021) contend that "vaccine effectiveness after one dose was lower by approximately 12 to 19 percentage points against the delta variant than against the alpha variant" (p.650).

In their study carried out among Americans, Kreps et al. (2021) revealed that the brand or vaccine manufacturer did not influence the public's inclination to take any specific COVID-19 vaccine. On the contrary, in the context of the United Arab Emirates, Sadik et al. (2022) found that vaccine acceptance

was higher for Pfizer (35%) and AstraZeneca (21%) vaccines among health-care workers.

The elderly and people with comorbidities are more susceptible to being infected with COVID-19 (Lipsitch & Dean, 2021). Liang, et al. (2021) have found that COVID-19 vaccinations are linked with reduced fatality rates. Using data from Israel's largest health care organization, Dagan et al. (2021) conclude that with respect to the BNT162b2 mRNA vaccine, there is an "estimated effectiveness in preventing death from Covid-19 [of] 72% (95% CI, 19 to 100) for days 14 through 20 after the first dose" (p.1412).

There are complex factors like age, sex, residing alone, and ethnicity that shape people's attitudes to COVID-19 vaccines (Kadambari & Vanderslott, 2021; Okubo et al., 2021). It has been argued that low levels of public trust produce high vaccine hesitancy. Schernhammer et al. (2022) believe that the "strong correlation between distrust in the vaccine and distrust in authorities suggests a common cause of disengagement from public discourse" (p.161).

Jamaica has been experiencing many problems on its political landscape. Recently, there has been a significant decline in voter turnout (Charles, 2021). With a shrinking economy and high rates of corruption, many Jamaicans feel that their government is not responsive to their needs (McCalpin, 2011). The distrust for government and negative attitudes toward leadership are pervasive features of the political culture in Latin America and the Caribbean (Levitt, 2015). The discussion on vaccination uptake should be sensitive to such realities due to the association with low

COVID-19 vaccination rates. Correspondingly, findings from CAPRI (2022) indicated that there is a high level of distrust for the Jamaican government – “this lack of trust is evident with regard to the COVID-19 vaccine as nearly 80 percent of those who did not take it indicated that they lacked trust in their government, compared to 36 percent of people who do trust the Government.” Distrust of public health bodies also shapes people’s attitudes toward COVID-19 vaccines (Kadambari & Vander-slott, 2021). Okubo et al. (2021) highlighted that the most common reason for not getting vaccinated in Japan was linked to the adverse reactions produced by COVID-19 vaccines.

There are certain categories of individuals who have expressed some hesitance toward taking the COVID-19 vaccine. Wang et al. (2021) reported that based on their pregnancy status, some people were not inclined to receive the COVID-19 vaccine. With respect to minorities, McElfish et al. (2021) found that COVID-19 vaccine hesitancy was higher among racial and ethnic minorities in the Marshall Islands. In the USA, Willis et al. (2022) found that the “odds of COVID-19 vaccine hesitancy were 1.70 times greater for Black adults who experienced the death of a close friend/family member due to COVID-19 and 2.61 times greater for individuals reporting discrimination with police or in the courts” (p.1).

The COVID-19 pandemic has turned the spotlight on a lingering debate regarding vaccination hesitancy (Coustasse, Kimble, & Maxik, 2021). It has been reported in the literature that there are several factors that shape people’s attitudes towards COVID-19

vaccines. These factors include low levels of trust in government, concerns regarding the efficacy and potential side effects of the vaccine, personal choice, and one’s religious beliefs. These factors can potentially undermine a country’s ability to effectively tackle the spread of the coronavirus. The next section reports on the study’s methodology.

METHODS

The media is an agent of socialization that shapes people’s opinions of various issues. It also influences “public and policy-makers perceptions of public health issues and their solutions” (Buckton et al., 2018, p.1). Newspapers are among the main channels through which people learn about COVID-19 in Jamaica.

Content analysis of newspapers specifically covering COVID-19 vaccinations forms the empirical basis for this study. A content analysis of Jamaican newspapers was selected as newspapers provide invaluable sources of information on a range of issues and there has been wide coverage of COVID-19 in Jamaica’s leading media houses. It was also interesting to see how COVID-19-related issues were framed in newspapers during a time of growing uncertainty in Jamaica.

The sample in this study consisted of N=200 articles (columns, editorials, and news stories) published in the online editions of the Jamaica Gleaner (n=113) and the Jamaica Observer (n=87). These newspapers were selected because they are Jamaica’s leading and oldest daily newspapers. They also have a large readership and frequently report stories on the topic of COVID-19. The print editions of the

Jamaica Gleaner and Jamaica Observer were founded in 1834 and 1993 respectively. The articles selected for analysis were published between March 10, 2020, and February 20, 2022.

PROCEDURES

The Jamaica Gleaner and Jamaica Observer online archives were searched with the terms “COVID-19”, “COVID-19 vaccines” and “COVID-19 vaccine hesitancy”. After filtering, articles were retrieved and selected for analysis. They were meticulously examined and read to identify and code the emerging themes guided by the scientific literature on global health, SIDS, and COVID-19.

Keyword searches of “COVID-19”, “COVID-19 vaccines” and “COVID-19 vaccine hesitancy” generated 23,292 articles in the Jamaica Gleaner newspaper of which 113 met the study’s inclusion criteria. With respect to the Jamaica Observer newspaper, there were 29,569 articles and 87 were selected for analysis.¹ Having retrieved many articles from the initial search, some were excluded because they did not primarily focus on COVID-19, COVID-19 vaccines, and COVID19 vaccine hesitancy in the Jamaica context (See Table 1 below).

The sample (N=200) was divided and read in batches of 25 to develop a coding frame. This allowed the researcher to record potential thematic categories that were

applicable to the study as they emerged. The thematic categories that were collected were grouped into four broad categories: How is COVID-19 described in Jamaica? What effects has COVID-19 produced in Jamaica?² What factors are associated with vaccine hesitancy? Are there specific characteristics among Jamaicans who are vaccine-hesitant?

Results

Overview of Sample

This section reports the data generated by the Jamaica Gleaner (n=113) and the Jamaica Observer (n=87). Some characteristics and frequencies of reports from the sample are presented in Table 2 below. The diverse attitudes that Jamaicans have towards COVID-19 vaccines suggest the need to better organize and coordinate COVID-19 responses to address the concerns of the unvaccinated.

The nine themes below emerged from the newspapers analysed in this study:

Themes

Theme 1: Ongoing Health Concerns

Few articles with the theme ‘ongoing health challenges’ were reported in either the Jamaica Gleaner (6.1%) or the Jamaica Observer (5.7 %). The most frequently mentioned health challenge was “cardiac complications”. A male cardiologist explained that “*one of the issues that has raised public concern is the risk*

1 The total number of newspaper articles analysed in this study was 200 (N=200). The breakdown is as follows: The Jamaica Observer (n=87) and the Jamaica Gleaner (n=113).

2 Although these two questions may not appear to be directly connected to the topic under inquiry, they provide insight into the issues being investigated and strengthen the analysis.

TABLE 1. DESCRIPTION OF INITIAL ARTICLES GATHERED FROM NEWSPAPERS IN THIS STUDY

Newspaper	COVID-19 articles	COVID-19 vaccines articles	COVID-19 vaccine hesitancy articles	Total
The Jamaica Gleaner	500	22,000	792	23,292
The Jamaica Observer	22,324	4,000	245	26,569

Note. Source: Fieldwork (2022).

TABLE 2. ATTITUDES TO COVID-19 VACCINES AS REPORTED IN THE JAMAICA GLEANER (N=113) AND JAMAICA OBSERVER (N=87) NEWSPAPERS

Frequency of themes reported in newspapers									
	Ongoing Health Concerns	Distrust of Government & Health Officials	Vaccine Safety Concerns	Personal Choice	Perception of Pandemic	Religious Beliefs	Vaccine Manufacturer country Preference	Insufficient Knowledge regarding COVID-19 vaccines	Side effects of COVID19 vaccines
The Jamaica Gleaner	7 (6.1%)	16 (14.2%)	30 (26.5%)	15 (13.3%)	7 (6.2%)	4 (3.5%)	6 (5.3%)	14 (12.4%)	14 (12.4%)
The Jamaica Observer	5 (5.7%)	24 (27.6%)	15 (17.2%)	14 (16.1%)	9 (10.3%)	0 (0%)	7 (8%)	9 (10.3%)	4 (4.6%)

Note. Source: Fieldwork (2022)

of myocarditis after vaccination.” (Jamaica Observer, 20.2.2022).

Theme 2: Distrust of Government and Health Authorities

Reports that mentioned distrust of government in the Jamaica Observer (27.6 %) exceeded those in the Jamaica Gleaner (14.2 %). The Jamaica Gleaner (28.12.2021) reported that *“Jamaicans are deeply distrustful of the Government’s COVID-19 vaccination campaign, a viewpoint that has contributed to vaccine hesitancy.”* A comment made by a businessman and former civil society leader embodies some of the major problems associated with the distrust

for government, *“Distrust is viewed as the main reason for recurring low voter turnout at the polls, and the vaccine hesitancy to fight the pandemic. The end product from this bitter divorce between the people and politics is that the nation agrees on nothing when consensus is widely needed”* (The Jamaica Gleaner, 2.01.2022).

Some articles contained discussions about the poor management of Jamaica’s vaccination response. A priest opined, *“The question of political leadership and governance will also have to be re-examined. What COVID-19 has revealed in almost every country, is a lack of accountability and transparency in the management of infectious diseases”* (Jamaica Gleaner, 9.02.2022). With reference to leadership, a political ombudsman

expressed that *“Jamaicans deserve a strong system of governance and national leaders who are inspired to work together...”* (Jamaica Observer, 14.10.2021). A glaring narrative that testified to the declining levels of support for the Jamaican government was echoed by a female international singer/songwriter who said, *“It seems they have discarded, like filthy rags, the voices of the majority, while the minority-supported autocracy doubles down on their errors, even as the little support they previously enjoyed wanes. This attitude only serves to lend credence to all the conspiracies circulating as to their motives”* (Jamaica Observer, 14.01.2022).

Theme 3: Vaccine Safety Concerns

There were reports dealing with vaccine safety as a factor that shaped the decision to delay the COVID-19 vaccine in both the Jamaica Gleaner (n=30) and the Jamaica Observer (n=15). A Jamaica Gleaner (13.01.2021) report noted, *“Some Jamaicans have expressed concern about getting vaccinated now that COVID-19 vaccines are available in the United States and other countries and are expected to reach our shores by April. While more COVID-19 vaccines are being developed as quickly as possible, routine processes and procedures remain in place to ensure the safety of any vaccine that is authorised or approved for use. Safety is a top priority, and there are many reasons to get vaccinated”*.

Theme 4: Personal Choice

Personal choice plays an important role in the lives of many Jamaicans who have decided not to take the COVID-19 vaccine. In relation to

taking the COVID-19 vaccine, a male leader in the Adventist church reported, *“The taking of vaccine is a personal decision and persons have a right to exercise their conscience, and hence no one who refuses to take the COVID-19 vaccine or opposes it will be sanctioned by the church”* (Jamaica Gleaner, 13.09.2021). A female reggae singer said, *“Even if the vaccine worked, I would be against it because it’s a personal decision for me”* (Jamaica Observer, 7.02.2022). A male taxi-driver emphatically stated, *“I would rather dead [sic. die] than take any COVID-19 vaccine... If me have the choice between taking the vaccine or taking the death, me ago [sic. I will] take the death”* (Jamaica Observer, 14.08.2021).

Theme 5: Insufficient knowledge regarding the efficacy of the vaccine

Many Jamaicans lack sufficient knowledge of the COVID-19 vaccines. The Jamaica Gleaner covered 14 stories (n=14) while the Observer covered just over half of that number (n=9) on the same topic. An Opposition Spokesman for Health described the situation in the following way, *“Some persons want more information; they want an honest discussion so they can inform themselves whether they should take it or not. Government has not given the citizens the opportunity to have that discussion so the pros and cons of vaccination can be ventilated”* (Jamaica Gleaner, 14.02.2022). He also emphasized that a shift was required in Jamaica’s vaccination campaign: *“So we need a new message, we need new ambassadors, youth ambassadors, professional ambassadors”* (Jamaica Gleaner, 14.02.2022).

Theme 6: Perception of the Pandemic

Jamaicans have characterised the pandemic in a plethora of ways. They also hold varying views about its impact on their lives. A sobering view of the pandemic was offered by a Priest who explains: *“I believe the pandemic has given the world an opportunity to pause, breathe, and re-examine many things to which we have become accustomed, and which were not necessarily serving us well. For one thing, there has to be a reassessment in every country of the health infrastructure and equity in the distribution of health benefits to the wider society. The virus has revealed the ramshackle nature of much of the world’s health infrastructure. Even in developed countries this inadequacy was clearly evident”* (Jamaica Observer, 9.02.2022). Additionally, a male obstetrician and gynaecologist (OB-GYN) was quoted as saying, *“So it has become painfully obvious that surviving this pandemic will involve more than being stuck with a needle and avoiding other humans”* (Jamaica Gleaner, 16.11.2021).

Theme 7: Religious Beliefs

There were few articles that mentioned religious beliefs as a factor that has shaped the attitudes of Jamaicans towards the COVID-19 vaccines. There were no reports in the Jamaica Observer and four in the Jamaica Gleaner.

A Jamaica Gleaner (13.04.2020) editorial reported that *“believers think they can do whatever they want, once it is pleasing to their God and they believe they are protected.”* Additionally, a male OBGYN, highlighted that *“The inconvenient truth is that during this pandemic,*

many who claimed to be covered with the blood of Jesus are now covered with six feet of dirt and a concrete slab after contracting COVID-19. The virus is no respecter of age, gender, ethnicity, or religious belief” (Jamaica Gleaner, 11.05.2020).

Theme 8: Vaccine Manufacturer Country Preference

Some reports mentioned a greater preference for vaccines manufactured in certain locations as a factor that influences the attitudes of Jamaicans towards COVID-19 vaccines. The Jamaica Observer (n=7) had more reports on this subject than the Jamaica Gleaner (n=6). A scientist in her letter to the editor in the Jamaica Observer (14.12.2021), lamented that *“I have not yet been inoculated... I, along with a group of my colleagues and close acquaintances, decided that the Sinopharm vaccine would be our vaccine of choice.”* The Prime Minister of Jamaica in the Jamaica Gleaner (20.09.2021) urged Jamaicans to take any vaccine available. He reiterated that *“at the beginning of the country’s vaccination drive, only the AstraZeneca vaccines were available. However, since the introduction of the Pfizer and Johnson and Johnson vaccines, several persons have indicated a preference for Pfizer and are refusing to be inoculated with anything else”* (Jamaica Gleaner, 20.09.2021).

Theme 9: Side Effects of COVID-19 Vaccines

The Jamaica Gleaner (n=14) carried more stories than the Jamaica Observer (n=4) regarding the side effects of COVID-19 as a disincentive to becoming vaccinated. Some side-effects of the vaccination affecting women which were

reported in the Jamaica Gleaner (28.09.2021) include *“disruption of their menstrual cycles”* and *“menopausal women experiencing vaginal bleeding after getting the jab”*. A male hospital administrator said that he didn’t trust the vaccine and would not take it for fear of undesirable side effects (Jamaica Gleaner, 14.12.2020). His views are typical. Also pointing to the side effects of the COVID-19 vaccine, a female nurse indicated that *“I can’t just take it like that. I would have to know the effects it will take on my body. I am not sure if I will take it”* (Jamaica Gleaner, 14.12.2020).

DISCUSSION

This study examined reports (N=200) from the Jamaica Observer (n=87) and the Jamaica Gleaner (n=113) newspapers to comprehend the factors that shape the attitudes of Jamaicans towards COVID-19 vaccines. Understanding these attitudes cannot take place in isolation from factors at the personal and societal levels like culture.

The analysis identified vaccine safety concerns, distrust for the Jamaican government, and insufficient knowledge about COVID-19 vaccines as the leading factors that shape the attitudes of Jamaicans towards becoming vaccinated. Distrust for the government was frequently mentioned in relation to the perception of the Jamaican government’s poor leadership in response to the pandemic, corruption, and a seeming politicization of the vaccination campaign. These findings are consistent with the previous findings of Charles (2021), McCalpin (2011), and research done by CAPRI (2022) which points to the declining levels of

trust in the government. Such findings are also similar to those in Western countries, reported earlier in the literature (Allington et al., 2021; Schernhammer et al., 2022; Kadambari & Vanderslott, 2021). This study suggests that vaccination is only one element in the recipe to limit the spread of diseases, and a sense of trust between citizens and the government will be a key part of the rebuilding process. Secondly, people must have greater access to resources and information to enable them to lead more productive lives and make informed decisions.

There were numerous stories (n=45) that highlighted COVID-19 vaccination concerns. The concerns related to the safety of such vaccines are understandable given the time that these vaccines were developed and the limited knowledge that Jamaicans have of their efficacy. The side-effects of the COVID-19 vaccines were linked to COVID-19 vaccination hesitancy in this study. This finding parallels Okubu’s (2021) work on Japanese, and Saied et al. (2021) on Egyptian medical students. These findings are also in keeping with the Heath Behaviour model which emphasizes the role of risk, susceptibility, and severity.

Some reports (n=29) mentioned personal choice as a factor that shapes the attitudes of Jamaicans towards COVID-19 vaccines. In Jamaican society, there is a gap in the information circulated about the benefits of COVID-19 vaccines and calls to improve vaccine uptake. This study makes the case for increased sensitization of people towards the protection that vaccinations offer. The failure to develop a more transparent COVID-19 vaccination response in Jamaica has generated much anxiety and fear among citizens which

nourishes vaccination hesitance. These findings corroborate research done by Bailey and McCaw-Binns (2022).

Broadly, the spread of COVID-19 reinforces the inequities perpetuated by colonialism and therefore, this study has relevance for SIDS in a wider context. COVID-19 has exposed Jamaica to a range of issues that have had a domino effect on its economy and society in general. The narrow resource base, economies of scale, and limited financial resources have had a significant impact on the way health care is accessed and delivered. These factors have undermined Jamaica's performance at the domestic and international levels. The pandemic has also placed burdens on marginalised groups like women, the poor, and the elderly. Some of the issues associated with vaccine hesitancy in Jamaica can shed light on other Caribbean states given the point that similar institutions (e.g., the media, schools, churches, and family), combined with concerns (ineffectiveness of the vaccines, fears of side-effects, distrust of government, and underlying health issues), inform people's perception of the COVID-19 vaccines. In these contexts, the Health Belief Model aptly explains people's attitudes towards COVID-19 vaccine uptake.

The success of strategies to improve vaccination uptake undeniably depend on continuous cooperation between citizens and the Jamaican government to build trust among all stakeholders.

To boost vaccination uptake there are steps that can be taken such as having home-delivered vaccines, workplace vaccination sites, and drawing on vaccination ambassadors. There is also the need to strengthen online

media campaigns given the breadth and scope of social media platforms.

The study finds that there are several factors that shape the attitudes of Jamaicans towards COVID-19 vaccines. These include the potential side effects of COVID-19 vaccines, personal choice, perception of the pandemic, insufficient knowledge regarding the efficacy of the vaccines, religious beliefs, and distrust of both the Jamaican government and health authorities. Based on such findings, there exists a critical need to improve the COVID-19 vaccination uptake among Jamaicans. Understanding the specificities concerning vaccine hesitancy will allow the Jamaican government and healthcare providers to better organise public sensitisation campaigns to address the concerns of the unvaccinated in Jamaica.

LIMITATIONS

While there are some shortcomings of media content analysis, the enhanced understanding offered by this study may help to inform efforts to better manage the pandemic which can improve the citizen's understanding of the potential of being vaccinated. The study of vaccination hesitancy reported in newspapers has contributed to the broad literature on COVID-19 and the vulnerability of islands in the international system by showing that the causes of COVID-19 vaccine hesitancy (despite some content-specific factors like culture) may be similar to vaccine hesitancy in other jurisdictions that were reported in the scientific literature. Other limitations of the study include the point that newspaper reports are sometimes biased and incomplete. In terms

of the direction for future research, researchers looking at the factors that shape attitudes toward COVID-19 vaccines in newspaper reports should aim to triangulate such reports with in-depth interviews or focus groups to provide a deeper understanding of delays in becoming vaccinated. Secondly, a comparative assessment of vaccine hesitancy in countries like Haiti and Jamaica, which have high rates of COVID-19 vaccine hesitancy, a lack of confidence in some vaccines, and high levels of voter apathy, can be considered.

CONCLUSION

The human body is a contested space. While people have the right to make sovereign decisions, their exposure to greater levels of information can equip them to take a course of action that may lead to better outcomes at the community and national levels.

Low COVID-19 vaccination rates have reinforced concerns about having informed citizens and managing state resources (albeit limited) to respond to their needs. Such dynamics are part of a wider debate in Caribbean International Relations and Political Science concerning democracy and development which have special implications for SIDS. Jamaica is one of the most influential countries in the Anglophone Caribbean. Notwithstanding its current experience with low COVID-19 vaccination uptake, the country has witnessed successes on my fronts including its vaccination efforts which date back to 1950. The country provides a compelling case for analyzing the challenges that the pandemic has imposed on islands in the international

system. Undoubtedly, it will be difficult for Jamaica to fully recover from the losses that are linked to the pandemic.

The number of cases and deaths attributed to COVID-19 has amplified many concerns for SIDS like Jamaica with various insecurities (e.g., food and water), and an ailing healthcare sector that has struggled under the weight of the International Monetary Fund's policy prescriptions. Austerity measures have compromised Jamaica's ability to spend more money on improving its health care sector. Without a solid health sector transformation programme and ongoing public awareness campaigns, vaccine hesitancy will continue to pose major barriers to achieving Jamaica's goals espoused in Vision2030.

The choice to delay vaccination must also be respected. What should be emphasized is that all individuals must strive to take the necessary precautions to protect themselves during the pandemic and minimize threats to others.

The study has identified several factors that shape the attitudes of Jamaicans towards COVID-19 vaccines. It can be useful in informing intervention strategies to improve the country's vaccination uptake. It has highlighted the need for greater sensitivity toward community and national public education campaigns to ally some of the uncertainties that various categories of people may have in relation to COVID-19 vaccines. These campaigns should make more use of print media sources such as newspapers and social media platforms like Twitter and Facebook, to better inform citizens as Jamaica transitions toward some semblance of normalcy, two years after feeling the full brunt of COVID-19.

REFERENCES

- Aalberg, T., & Curran, J. (2012). How Media Inform Democracy: Central debates. In T.Aalberg & J. Curran (Eds.), *How Media Inform Democracy: A Comparative Approach* (pp. 17-28). Routledge.
- Alleyne, S. I., Cruickshank, J. K., Golding, A. L., & Morrison, E. (1989). Mortality from diabetes mellitus in Jamaica. *Bulletin of the Pan American Health Organization*, 23 (3), 306-314.
- Allington, D., McAndrew, S., Moxham-Hall, V., & Duffy, B. (2021). Coronavirus conspiracy suspicions, general vaccine attitudes, trust and coronavirus information source as predictors of vaccine hesitancy among UK residents during the COVID-19 pandemic. *Psychological Medicine*, 1-12. doi:10.1017/S0033291721001434.
- Amour, R., Robinson, J., & Govia, I. (2020). The COVID-19 long-term care situation in Jamaica. International Long-Term Care Policy Network, CPEC-LSE, 25 May 2020.
- Ashley, D., & Bernal, R. (1985). A review of poliomyelitis epidemics in Jamaica: The immunization policies and socio-economic implications. *Disasters*, 9 (2), 139-143.
- Aziz, S., Niazi, M. A. K., & Ghani, U. (2022). Effect of knowledge, social and religious factors effecting the intention of Muslims in Pakistan to receive COVID-19 vaccination: mediating role of attitude towards COVID-19 vaccination. *Journal of Islamic Marketing* (ahead-of-print). <https://doi.org/10.1108/JIMA-12-2021-0400>.
- Bailey, A., & McCaw-Binns, A. (2022). Advancing communication strategies in Jamaica's response to the COVID-19 pandemic. *West Indian Med J*, 69 (7), 461-463.
- Banerjee, D., & Meena, K. S. (2021). COVID-19 as an "infodemic" in public health: Critical role of the social media. *Frontiers in Public Health*, 9 (231), 1-8.
- Bavel, J. J. V., Baicker, K., Boggio, P. S. et al. (2020). Using social and behavioural science to support COVID-19 pandemic response. *Nature Human Behaviour*, 4, 460-471.
- Bernal, J. L., Andrews, N., Gower, C., Gallagher, E., Simmons, R., Thelwall, S. et al. (2021). Effectiveness of Covid-19 vaccines against the B. 1.617. 2 (Delta) variant. *New England Journal of Medicine*, 385, 585-594.
- Blackman, S. N. (2021). The impact of Covid-19 on education equity: A view from Barbados and Jamaica. *Prospects*, 1-15. <https://doi.org/10.1007/s11125-021-09568-4>
- Bourne, P. A. (2022). A comparative analysis of the behaviour of vaccinated and unvaccinated Jamaicans against the Covid-19 virus. *Journal of Internal Medicine Research & Reports*. SRC/JIMRR-101, 1 (1), 2-8.
- Briguglio, L., Byron, J., Moncada, S., & Veenendaal W. (Eds.) (2021). *Handbook of Governance in Small States*. Routledge.
- Bronte-Tinkew, J., & Dejong, G. F. (2005). Do household structure and household economic resources predict childhood immunization? Evidence from Jamaica and Trinidad and Tobago. *Population Research and Policy Review*, 24 (1), 27-57.
- Buckton, C. H., Hyseni, L., Patterson, C., Katikireddi, S. V., Lloyd-Williams, F., Elliott-Green, ... Hilton, S. (2017). *Media Representations of Sugar Consumption and Sugar-Sweetened Beverage Tax in UK Newspapers: Implications for Public Health Policy*. Society for Social Medicine, 61st Annual Scientific Meeting, Manchester, UK, 5-8 Sept. 2017.
- Byron, J., Laguardia Martinez, J., Montoute, A. & Niles, K. (2021). Impacts of COVID-19 in the Com-

- monwealth Caribbean: Key lessons. *The Round Table*, 110 (1), 99-119.
- Caldwell, J. C. (2007). Poverty and Life Expectancy: The Jamaica Paradox. *The English Historical Review*, 122 (498), 1063-1064.
- Caribbean Policy Research Institute (CAPRI). (2022). *Long shot: aiming to reduce vaccine hesitancy*. CAPRI. <https://www.capricaribbean.org/content/long-shot-aiming-reduce-vaccine-hesitancy>.
- Charles, C. (2021). Election Forecasting in the Caribbean: Reflections from Jamaica 2015-2020. *Available at SSRN 3776949*.
- Corcoran, K. E., Scheitle, C. P., & DiGregorio, B. D. (2021). Christian nationalism and COVID-19 vaccine hesitancy and uptake. *Vaccine*, 39 (45), 6614-6621.
- Coustasse, A., Kimble, C., & Maxik, K. (2021). COVID-19 and vaccine hesitancy: A challenge the United States must overcome. *The Journal of Ambulatory Care Management*, 44 (1), 71-75.
- Dagan, N., Barda, N., Kepten, E., Miron, O., Perchik, S., Katz, ... Balicer, R. D. (2021). BNT162b2 mRNA Covid-19 Vaccine in a Nationwide Mass Vaccination Setting. *The New England Journal of Medicine*, 384 (15), 1412-1423.
- Dryhurst, S., Schneider, C. R., Kerr, J., Freeman, A. L. J., Recchia, G., van der Bles, A.M. (2020). Risk perceptions of COVID-19 around the world. *Journal of Risk Research*, 23 (7-8), 1-13.
- Dunkley-Willis, A. (2022, March 12). Study: Distrust of Gov't, vaccine caused low vax rate. *The Jamaica Observer*. <https://www.jamaicaobserver.com/news/study-distrust-of-govt-vaccine-caused-low-vax-rate/>.
- Edwards, R. L., Patrician, P. A., Bakitas, M., & Markaki, A. (2021). Palliative care integration: a critical review of nurse migration effect in Jamaica. *BMC Palliative Care*, 20 (1), 1-19.
- Evans, S. J., & Jewell, N. P. (2021). Vaccine effectiveness studies in the field. *New England Journal of Medicine*, 385 (7), 650-651.
- Gallagher, M. E., Sieben, A. J., Nelson, K. N., Kraay, A. N., Lopman, B., Handel, A., & Koelle, K. (2021). Considering indirect benefits is critical when evaluating SARS-CoV-2 vaccine candidates. *Nature Medicine* 27 (1), 4-5.
- Giannini, S. (2020, March 25). Three ways to plan for equity during the coronavirus school closures. World Education Blog. <https://gemreportunesco.wordpress.com/2020/03/25/three-ways-to-plan-for-equity-during-the-coronavirus-school-closures/>
- Goha, A., Mezue, K., Edwards, P. (2021). Indigenous people and the COVID-19 pandemic: the tip of an iceberg of social and economic inequities. *Journal of Epidemiology and Community Health* 75 (2), 207-208.
- Henry, D. A., Jones, M. A., Stehlik, P., & Glasziou, P. P. (2021). Effectiveness of COVID19 vaccines: Findings from real world studies. *The Medical Journal of Australia*, 215 (4), 149-151.
- Hochbaum, G. M. (1958). *Public participation in medical screening programs: A socio-psychological study* (Public Health Service Publication No. 572).
- Washington D. C. Government Printing Office. US Department of Health, Education, and Welfare, Public Health Service, Bureau of State Services, Division of Special Health Services, Tuberculosis Program.
- Jamaica Information Service (2012, May 7). *Immunization Programme Protects All*. <https://jis.gov.jm/immunization-programme-protects-all/#:~:text=As%20a%20result%20of%20the%20achievements%20of%20the%20programme%2C%20the,of%20newborn%20tetanus%20in%202001>. Accessed June 1, 2022.

- Jamaica Information Service (2022, March 12). *Jamaicans Still Being Encouraged to Get COVID-19 Vaccine*. <https://jis.gov.jm/jamaicans-still-being-encouraged-to-get-covid-19-vaccine/>.
- James, K., Thompson, C., Chin-Bailey, C., Davis, K. D., Nevins, D. H., & Walters, D. (2021). COVID-19 related risk perception among taxi operators in Kingston and St. Andrew, Jamaica. *Journal of Transport & Health*, 22 (101229), 1-9.
- Kadambari, S., & Vanderslott, S. (2021). Lessons about COVID-19 vaccine hesitancy among minority ethnic people in the UK. *The Lancet Infectious Diseases*, 21 (9), 1204-1206.
- Kim, D. D., Kung, C. S., & Perez, D. L. (2021). Helping the Public Understand Adverse Events Associated With COVID-19 Vaccinations: Lessons Learned from Functional Neurological Disorder. *JAMA Neurology*, 78 (7), 789-790.
- Kreps, S., Dasgupta, N., Brownstein, J. S., Hswen, Y., & Kriner, D. L. (2021). Public Attitudes Toward COVID-19 Vaccination: The role of vaccine attributes, incentives, and misinformation. *Nature Portfolio Journal Vaccines*, 6 (1), 1-7.
- Kumar, R., Beniwal, K., Bahurupi, Y., Kant, R., & Bairwa, M. (2021). Determinants of COVID-19 Vaccination Willingness Among Health Care Workers: A Quick Online Survey in India. *Korean Journal of Family Medicine*, 42 (6), 445-452.
- Lane, J., Means, A. R., Bardosh, K., Shapoval, A., Vio, F., Anderson, C., ... Mudender, F. (2021). Comparing COVID-19 physical distancing policies: Results from a physical distancing intensity coding framework for Botswana, India, Jamaica, Mozambique, Namibia, Ukraine, and the United States. *Globalization and Health*, 17 (124), 1-12.
- Larson, H. J., Smith, D. M., Paterson, P., Cumming, M., Eckersberger, E., Freifeld, C. C., ... Madoff, L. C. (2013). Measuring vaccine confidence: Analysis of data obtained by a media surveillance system used to analyse public concerns about vaccines. *The Lancet Infectious Diseases*, 13 (7), 606-613. [https://doi.org/10.1016/S1473-3099\(13\)70108-7](https://doi.org/10.1016/S1473-3099(13)70108-7)
- Levitt, B. S. (2015). Discrimination and the distrust of democratic institutions in Latin America. *Politics, Groups, and Identities*, 3 (3), 417-437.
- Liang, L. L., Kuo, H. S., Ho, H. J., & Wu, C. Y. (2021). COVID-19 vaccinations are associated with reduced fatality rates: Evidence from cross-county quasi-experiments. *Journal of Global Health*, 11 (05019), 1-9. <https://doi.org/10.7189/jogh.11.05019>.
- Lipsitch, M., & Dean, N. E. (2020). Understanding COVID-19 Vaccine Efficacy. *Science*, 370 (6518), 763-765.
- Lowitt, K., Ville, A. S., Lewis, P., & Hickey, G. M. (2015). Environmental Change and Food Security: The Special Case of Small Island Developing States. *Regional Environmental Change*, 15 (7), 1293-1298.
- Lupton, D. (2012). M-health and health promotion: The digital cyborg and surveillance society. *Social Theory & Health*, 10 (3), 229-244.
- MacDonald, N. E. (2015). Vaccine hesitancy: Definition, scope, and determinants. *Vaccine*, 33 (34), 4161-4164. <https://doi.org/10.1016/j.vaccine.2015.04.036>.
- Majid, U., & Ahmad, M. (2020). The factors that promote vaccine hesitancy, rejection, or delay in parents. *Qualitative Health Research*, 30 (11), 1762-1776.
- Mallow, P. J., Enis, A., Wackler, M., & Hooker, E. A. (2022). COVID-19 Financial Lottery Effect on Vaccine Hesitant Areas: Results from Ohio's Vax-A-Million Program. *The American Journal of Emergency Medicine*, 56, 316-317.

- Mallard, A., Pesantes, M. A., Zavaleta-Cortijo, C., & Ward, J. (2021). An urgent call to collect data related to COVID-19 and Indigenous populations globally. *BMJ Global Health*, 6 (3), e004655. <https://doi.org/10.1136/bmjgh-2020-004655>
- Mao, Y. & Richter, M. S. (2014). Content analysis: Canadian newspaper coverage of homelessness. In *SAGE Research Methods Cases* (pp. 1-15). <https://doi.org/10.4135/978144627305014526829>
- Marfe, G., Perna, S., & Shukla, A. K. (2021). Effectiveness of COVID-19 vaccines and their challenges. *Experimental and Therapeutic Medicine*, 22 (6), 1-19.
- Mathieu, E., Ritchie, H., Ortiz-Ospina, E., Roser, M., Hasell, J., Appel, C., ... Rodés-Guirao, L. (2021). A global database of COVID-19 vaccinations. *Nature Human Behaviour*, 5 (7), 956-959. <https://doi.org/10.1038/s41562-021-01160-2947-953>.
- McCalpin, J. (2011). No Truth, No Trust: Democracy, Governance and the Prospects for Truth Telling Mechanisms in Jamaica. *Kingston: UNDP and the Jamaica Council of Churches*.
- McElfish, P. A., Willis, D. E., Bogulski, C., Kelen, M., Riklon, S., Alik, E., & Williams, M. (2021). COVID-19 Vaccine Willingness and Hesitancy Among Marshallese Pacific Islanders. *Journal of Patient Experience*, 8, 1-7.
- Mehrotra, D. V., Janes, H. E., Fleming, T. R., Annunziato, P. W., Neuzil, K. M., Carpp, L. N., ... Luedtke, A., et al. (2021). Clinical Endpoints for Evaluating Efficacy in COVID-19 Vaccine Trials. *Annals of Internal Medicine*, 174 (2), 221-228.
- Mezue, K., Edwards, P., Nsofor, I., Goha, A., Anya, I., Madu, K., ... Madu, E. (2020). Sub-Saharan Africa Tackles COVID-19: Challenges and Opportunities. *Ethnicity & Disease*, 30 (4), 693-694.
- Miller, M. J., Loaiza, J. R., Takyar, A., & Gilman, R. H. (2020). COVID-19 In Latin America: Novel Transmission Dynamics for a Global Pandemic? *PLOS Neglected Tropical Diseases*, 14 (5), e0008265.
- Ministry of Health & Wellness Jamaica (2022, March 9). *COVID 19 Vaccination Tracker*. <https://www.moh.gov.jm/updates/coronavirus/covid19-vaccination-tracker/>
- Ng, J. W. J., Vaithilingam, S., Nair, M., Hwang, L. A., & Musa, K. I. (2022). Key Predictors Of COVID-19 Vaccine hesitancy in Malaysia: an integrated framework. *PLOS One*, 17 (5), e0268926.
- Okubo, R., Yoshioka, T., Ohfuji, S., Matsuo, T., & Tabuchi, T. (2021). COVID-19 vaccine hesitancy and its associated factors in Japan. *Vaccines*, 9 (6), 662. <https://doi.org/10.3390/vaccines9060662>
- Paltiel, A. D., Schwartz, J. L., Zheng, A., & Walensky, R. P. (2021). Clinical Outcomes of a COVID-19 Vaccine: Implementation Over Efficacy. Study Examines How Definitions and Thresholds of Vaccine Efficacy, Coupled with Different Levels of Implementation Effectiveness and Background Epidemic Severity, Translate Into Outcomes. *Health Affairs*, 40 (1), 42-52.
- Pan American Health Organisation (2021). Jamaica Becomes First Country in the Caribbean to Receive COVID-19 Vaccines through the COVAX Facility. <https://www.paho.org/en/news/15-3-2021-jamaica-becomes-first-country-caribbean-receive-covid-19-vaccines-through-covax>.
- Pan American Health Organisation (2015, April 22). *History of Vaccination Week in the Americas and Jamaica*. https://www3.paho.org/jam/index.php?option=com_content&view=article&id=102:vwa-jamaica&Itemid=214.

- Preston, S. H. (1980). Causes and consequences of mortality declines in less developed countries during the twentieth century. In R. Easterlin (Ed.), *Population and economic change in developing countries* (pp. 289-360). University of Chicago Press.
- Reuters (2022, June 5). *COVID-19 Global Tracker-Jamaica*. <https://graphics.reuters.com/world-coronavirus-tracker-and-maps/en/methodology/>.
- Ricketts, H. (2020). The Government of Jamaica (GoJ) COVID-19 pandemic stimulus response: An opportunity to regulate and formalize? *International Journal of Sociology and Social Policy*, 40 (9/10), 979-993. <https://doi.org/10.1108/IJSSP-07-2020-0363>.
- Riley, J. C. (2005). The timing and pace of health transitions around the world. *Population and Development Review*, 31 (4), 741-764.
- Roberts, H. A., Clark, D. A., Kalina, C., Sherman, C., Brislin, S., Heitzeg, M. M., & Hicks, B. M. (2022). To Vax or Not To Vax: Predictors Of Anti-Vax Attitudes And COVID-19 Vaccine Hesitancy Prior To Widespread Vaccine Availability. *PLOS One*, 17 (2), E0264019.
- Saddik, B., Al-Blawi, N., Shukla, A., Barqawi, H., Alsayed, H. A. H., Sharif-Askari, N. S., ... Halwani, R. (2022). Determinants of healthcare workers perceptions, acceptance and choice of COVID-19 vaccines: A cross-sectional study from the United Arab Emirates. *Human Vaccines & Immunotherapeutics*, 18 (1), 1-9.
- Saied, S. M., Saied, E. M., Kabbash, I. A., & Abdo, S. A. E. F. (2021). Vaccine hesitancy: Beliefs and barriers associated with COVID-19 vaccination among Egyptian medical students. *Journal of Medical Virology*, 93 (7), 4280-4291.
- Sallam, M. (2021). COVID-19 Vaccine hesitancy worldwide: A concise systematic review of vaccine acceptance rates. *Vaccines*, 9 (2), 160.
- Schernhammer, E., Weitzer, J., Laubichler, M. D., Birnmann, B. M., Bertau, M., Zenk, L., ... & Steiner, G. (2022). Correlates of COVID-19 vaccine hesitancy in Austria: trust and the government. *Journal of Public Health*, 44 (1), e106-e116.
- Sheller, M. (2021). Reconstructing tourism in the Caribbean: Connecting pandemic recovery, climate resilience, and sustainable tourism through mobility justice. *Journal of Sustainable Tourism*, 29 (9), 1436-1449.
- Siwapathomchai, S. (2021). Thai children's new media use at home: Intra-family communication and reverse socialisation. *Journal of Language and Culture*, 40 (2), 166-196.
- Stubbs, M., Govia, I., Robinson, J. N., Amour, R., & Freeman, E. (2021). The experiences of caregivers of persons living with dementia in Jamaica during COVID-19. *Gerontology and Geriatric Medicine*, 7, 1-6.
- Sv, P., Tandon, J., & Hinduja, H. (2021). Indian citizen's perspective about side effects of COVID-19 vaccine-A machine learning study. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*, 15 (4), 102172. DOI: 10.1016/j.dsx.2021.06.009
- Tao, L., Wang, R., Han, N., Liu, J., Yuan, C., Deng, L., ... Liu, J. (2021). Acceptance of a COVID-19 vaccine and associated factors among pregnant women in China: A multi-center cross-sectional study based on health belief model. *Human Vaccines & Immunotherapeutics*, 17 (8), 2378-2388.
- Thame, M. (2021). Jamaica, Covid-19, and black freedom. *Cultural Dynamics*, 33 (3), 220-232.
- Valenzuela, S., & McCombs, M. (2019). The agenda-setting role of the news media. In D. Stacks, M. Salwen, & K. Eichhorn (Eds.), *An integrated approach to communication theory and research* (3rd ed., pp. 99-112). Routledge.

- Vasciannie, L. (2021). Jamaica and Covid-19: issues of law and policy in the first year. *The Round Table*, 110 (4), 477-491.
- Wang, T., Krishnamurti, T., Bernard, M., Lopa, S., Quinn, B., & Simhan, H. (2021). Perceptions and knowledge of COVID-19 vaccine safety and efficacy among vaccinated and non-vaccinated obstetric healthcare workers. *Behavioral Medicine*, 1-13.
- Williams, R. (2022). *Unvaccinated Accounts For 97.7 Percent of COVID-19 deaths*. Report prepared for the Jamaica Information Service. <https://jis.gov.jm/unvaccinated-accounts-for-97-7-per-cent-of-covid-19-deaths/>
- Willis, D. E., Andersen, J. A., Montgomery, B. E., Selig, J. P., Shah, S. K., Zaller, N., ... McElfish, P. A. (2022). COVID-19 Vaccine Hesitancy and Experiences of Discrimination Among Black Adults. *Journal of Racial and Ethnic Health Disparities*, 1-10.
- Wint, A. G. (2002). International Competitiveness and Rare Tradeables: Assessing the Jamaican Health System. *Social and Economic Studies*, 51 (3), 1-26.
- World Health Organization (1992). Expanded Programme on Immunization: A parish-level evaluation of the surveillance system. *Weekly Epidemiological Record= Relevé épidémiologique hebdomadaire*, 67(37), 277-279.
- World Health Organization (2009). WHO vaccine-preventable diseases: Monitoring system: 2009 global summary (No. WHO/IVB/2009). WHO.