Syrian Refugee Crisis: Research On Immunization Rates Of Syrian Refugees

Introduction

Nevine Mohammed Almasre, an infant, lies on a hospital bed in Taanayel, Lebanon. Dr.Zaher Haider has noticed life-threatening symptoms endangering this 19-month-old's health; Haider is harrowed by Nevine's loose limbs on the right side of her body and is fearful that she has contracted polio. Polio is an infectious viral disease that causes nerve damage, which escalates into paralysis, difficulty breathing, and oftentimes death. If Nevine survives Polio, she will be predisposed to develop post-polio functional deterioration and will be prone to die prematurely.

The future is grim for Nevine. Polio has Nevine paralyzed in cessation and on top of this, Nevine is in limbo; Nevine is a Syrian refugee. Poliovirus continues to target the most vulnerable in periphery nations, despite being close to eradication by virtue of the inactivated poliovirus vaccine (IPV), which generates immunity that lasts a lifetime. The Global Polio Eradication Initiative, funded by the World Health Organization and aided by its NGO partners, claims that this global initiative to immunize children against polio has been successful, since GPEI's formation in 1988, with a reduction of cases by 99.9%. The 0.1% final percent includes rare under-immunized communities, e.g. Lebanon's Shatila refugee camp.

The immunization of refugees remains significantly unrecognized and underfunded. NGOs administering vital interventions struggle to survive as the exigencies are so monstrous and neglected, with vaccinations and medical care so scant. In an alternative universe, if Nevine was not a refugee, she could have received the 6-in-1 hexavalent vaccine.

The Syrian refugee crisis can be attested as the gravest humanitarian disaster afflicting the globe. In recent years, the number of refugees fleeing persecution from Syria has grown exponentially. The mainstay of refugees are temporary refugee camps; however, interim refugee camps cannot make ends meet because of this recent influx of individuals. Makeshift bivouacs are running out of funds necessary to keep them afloat, resulting in poor health, food insecurity, and poverty. A preponderance of inequalities is blatantly apparent to refugee holding nations.

This research paper examines the HDI value of two Arab nations in the Levant region, Lebanon and Jordan. Lebanon and Jordan have both received an inundation of Syrian refugees during the Syrian Civil War and subsequently experienced political, social and economic turmoils. Furthermore, this paper will compare Lebanon and Jordan's HDI values and underscore the conspicuous, grave role immunizations play in furnishing optimum health outcomes. The HDI is aberrant; compared to other measurements of inequality, the HDI takes into account disparities in health, education and quality of life. This goes beyond the scope of most apparatuses used by sociologists as a means of encompassing the inequalities of a nation; the go-to tool for organizations, governments, and stakeholders customarily includes income (e.g., GDP). Hence, the HDI is an incredibly progressive measurement tool because it pertains to the experience of being human and quality of life.

The objective of this research paper is to galvanize economists into revamping the HDI with a spotlight on immunization as a key contributor. Increased immunization rates can help lower inequalities by improving health outcomes, thus feasibly elevating a nation's HDI. The following section will be a review of the literature, and the third section will be the methodology of this paper's research. Following the methods section will be a discussion of the findings. To end, this report will address final concluding remarks the matter at hand.

Literature Review

The Human Development Index (henceforth referred to as the HDI) is a statistical measure for gauging a nation's long-term progress in economic and social aspects. The HDI was designed as a tool for the United Nations Development Program (henceforth referred to as UNDP) to measure the country's development. The purpose of the HDI does not align with the World Bank's laser focus on the economic sector of nations; the aim of the HDI is to highlight individuals and their capabilities as the key criteria for evaluating the development of a country, rather than solely economic growth. The calculation of a nation's HDI is configured by three significant criteria: quality of health, average years of education, and GNI per capita for standard of living. The HDI holds value in national policy debates, specifically when comparing how two countries with similar levels of GNI per capita can have different human development outgrowths. This contrast has fostered debate about government policy priorities on the macro level.

This research paper explicitly focused on Lebanon and Jordan because of their unwavering, vague approach to addressing the influx of Syrian refugees through their absent statutory frameworks. Both Jordan and Lebanon have not ratified the 1951 United Nations Convention Relating to the Status of Refugees or its accompanying 1967 protocol. In opposition to these standards, Lebanon and Jordan do not recognize the rights insured by the convention, unless the rights are included of international treaties (e.g. Universal Declaration of Human Rights). Refugees are seen as "guests" in Lebanon and Jordan and the safety of their lives relies primarily on IGOs and NGOs. The following two paragraphs will be a debriefing of the history of these two Arab nations stance on the refugee crisis.

Lebanon is a war-torn nation. The UNDP's 'Human Development Indices and Indicators: 2018 Statistical Update," states that Lebanon's HDI value since 2017 was 0.757. Lebanon ranks as number 80 out of 189 countries and territories, which places Lebanon in the high human development category. However, despite being indirectly involved, Lebanon has suffered immensely at the expense of violent conflict in the Syrian Arab Republic, Yemen, and Libya. In 2018, the Arab Center of DC reported that there was 1.5 million Syrian refugees in Lebanon; only 982,012 were registered. It estimated that there could be an additional 600,000-700,000 refugees from Syrian refugees in Lebanon who are unregistered. Scholars have pursued extensive research to understand how Lebanon — a host state who rejects the international refugee law regime — can adequately safeguard Syrian refugees. The President of Lebanon's Council of Ministers spoke straight from the shoulder about this situation stating that Lebanon is "not a country of permanent asylum." Lebanon's progress and further development is not guaranteed, and is an exemplar of a nation experiencing a refugee crisis that has impacted a country's HDI value. This concern is reinforced in the literature of inadequate immunization levels of Syrian refugees.

Jordan remains a strife-ridden country following the Syrian refugee crisis. The United Nations Development Programme's 'Human Development Indices and Indicators: 2018 Statistical Update," states that Jordan's HDI value since 2017 was 0.735. Jordan is 95th out of 180 countries rated on the HDI. Analogous to Lebanon, Jordan has felt the spillover effect of the Syrian Civil War, but still maintains its guarded policies of insulation from the Syrian conflict. In 2018, The Arab Center reported that there were 1.4 million refugees in Jordan; only 657,628 refugees were registered. Jordan's improvement in further development is ambiguous, and is a paragon for another Arab nation experiencing the spillover effects of the Syrian refugee crisis. The literature suggests that immunization rates correspond to Jordan and Lebanon's respective HDI values.

It is amoral to rank humanitarian tragedies, but by all accounts the severity and scope of the immunization crisis within the refugee crisis has been unrecognized. The Methods section of this paper will examine the immunization rates of refugees in Jordan, parallel to refugees in Lebanon — two Arab nations submerged in economic woes — and consequently, how this may affect HDI value. Further assessment illustrates how immunization rates could be associated and contribute to socioeconomic determinants of HDI targeting the most vulnerable populations. Understanding the role immunization plays in exacerbating inequalities could be critical in health intervention strategies and for achieving equity in health care for refugees.

Researchers have championed vaccines as the most significant medical advancement of the contemporary world. In periphery nations, infectious diseases overshadow non-communicable diseases as the leading cause of death and world-wide account for 3 million deaths a year. Mammoth death accounts remain a salient feature of infectious diseases and shed a light on health inequities substantially caused by economic disparities. Immunization can curtail health-care expenses, reduce inequalities, and promote economic growth in a plethora of ways. Byproducts of vaccination are mortality and morbidity reductions, longer life expectancy, improved health care infrastructure, and an increased average years of schooling for children. Furthermore, vaccination has been deemed to be the best method to prevent adolescent girls from developing cervical cancer and immunization has been responsible for lowered Hepatocellular Carcinoma. Individuals devoid of vaccination against infectious disease toy with death. Contracting an infectious disease — if not lethal — will hasten and cause significant, corrosive health reverberations until demise. The quality of life and health component of the HDI index is inadequate; this report suggests that the immunization role of refugees contributes to longer life expectancy and can be associated with a more "decent standard of living" if adequate health care is appropriated to refugees.

Methods

Archival research was used seek out primary data to extract from an array of research studies to collect my data. A bulk of the literature used in this research paper came from academic journals from the US National Library of Medicine National Institutes of Health, statistics from the UNDP Human Development Reports, and reports from the UN Refugee Agency (UNHCR) and the World Health Organization (WHO).

In 2014, the WHO recognized the significance of health financing in its WHO Global Health Expenditure Atlas and was perturbed with how financial resources are generated, allocated, and used in health systems. This report aptly stated how millions of individuals suffer and die

because of a lack of funds necessary to pay for health care. Inequitable access to health care further impels individuals into poverty because health care expenses have to be paid out of refugees' own pockets.

To retrieve data on the number of Syrian refugees immunized in Lebanon and Jordan, this report examined a medical journal written by Roberton et al., titled Challenges in Estimating Vaccine Coverage in Refugee and Displaced Populations: Results From Household Surveys in Jordan and Lebanon. In this study, questionnaires concerning demographic information and children's immunization status were administered to garner immunization status information.

The UNDP Human Development Reports served as a compass to see which nation — Lebanon or Jordan — is deemed more developed by the United Nations. The World Bank states that "human development is at the core of the World Bank's strategy to improve people's lives and support sustainable development. The Human Development research program spans education, health, social protection, and labor" (The World Bank Group). The HDI was created as an amalgamation index measuring average achievement in three salient dimensions of human development: knowledge, a healthy life of considerable length and a decent standard of living.

Figure 1. How the Human Development Index (HDI) is calculated by three dimensions.

Illustrated in Figure 1 is how the HDI is calculated. The HDI is a compound index of education, health and length of life, and per capita income benchmarks. The HDI is used to rank countries into 4 degrees of human development. Lebanon ranks at 80th out of 189 countries and territories, which places Lebanon in the high human development category, with an HDI value for 2017 of 0.757. Jordan ranks at 95th out of 180 countries rated on the HDI, with an HDI value for 2017 of 0.735.

Figure 2. Cluster Assignment by Governorate of Refugees in Lebanon and Jordan.

This table was orchestrated to better grasp issues Syrian refugees face in accessing health services surrounding vaccination; this research began in June 2014 in Jordan and began in Lebanon in March and April of 2015. The objective of this study was to obtain an in-depth evaluation of the health of Syrian refugees at the local, national, and regional levels.

To secure a nationally representative sample of Syrian refugee households, the researchers classified areas into divergent clusters assigned to cadastrals from data provided by the UNHCR of where registered refugees lived. For each cluster in Lebanon, the UNHCR randomly selected five registered refugee households that were recorded living in the pertained cluster's assigned sub-district. The study team interviewed the first household and asked about other Syrian households living in the vicinity; the interviewers used this approach to guarantee that there would be both registered and unregistered refugee households included in the survey. Then the primary caretakers of children were then interviewed using the provided questionnaire.

This methodology approach was followed similarly by the researchers in Lebanon, but began at the nearest business and asked the participant there to introduce the researchers to other Syrian households. Once the first household was interviewed, the first household would refer researchers to another Syrian refugee household. If the second household consented to participate, the referral cycle continued.

Table 1. Immunization Rates of Syrian Refugees households with children ages 12–23 months in Jordan and Lebanon.

The Expanded Program on Immunization was founded by the WHO with the objective of granting accessible vaccines to all children. An EPI card states if a child has received all immunizations on the WHO's standardized vaccination schedule. Participants of this questionnaire with a child 12-23 months, were asked to show researchers their child's EPI vaccination card. Only 24.3% of households in Jordan (n = 376) and 27.9% in Lebanon (n = 384) had a child aged 12–23 months among participant households. Vaccinations were recorded by analyzing the EPI card for of participants' children. 55.1% (n = 207) and 46.6% (n = 179) of participants presented their child's EPI card. Participants who could not provide or did not possess an EPI card for their child were asked to remember if the child had received each immunization on the schedule.

Table 4. Human Development Indices and Indicators of Lebanon, Origin of the data is the United Nations Development Programme Human Development Reports 2018 Statistical Update.

Table 5. Human Development Indices and Indicators of Jordan, Origin of the data is the United Nations Development Programme Human Development Reports 2018 Statistical Update.

This research paper drew a comparison between Lebanon and Jordan's HDI values. Lebanon far exceeded Jordan in subsections of the HDI; Lebanon's average life expectancy is 79.8 years compared to Jordan's 74.5 years, Lebanon's employment to population ratio is 44.2 against Jordan's 33.3, and Lebanon's GNI per capita is 13,378 opposed to Jordan's GNI per capita of 8,288. However, Jordan ranked higher in the category of expected years of schooling at 13.1 years, compared to Lebanon's 12.5 years.

Discussion

Refugee camps are breeding grounds for infectious diseases; the literature argues that higher immunization rates lead to a higher quality of life. The World Health Organization even claims that "immunization is a proven tool for controlling and eliminating life-threatening infectious diseases and is estimated to avert between 2 and 3 million deaths each year. It is one of the most cost-effective health investments" (WHO). This research paper does not avow the relationship between immunizations and quality of life to be causal; instead, this report is in support of the notion that socio-demographic determinants of HDI value can contribute or be associated with inequality in immunization coverage of refugees. This was examined through the comparison of Lebanon and Jordan's HDI values.

The significance of vaccines has been made explicit in the literature; vaccines are proven to reduce morbidity and mortality, particularly for children. Life expectancy is one of the three HDI dimensions, and it is important to take into the account of immunizations impact because refugees comprise a considerable amount of the overall population in Jordan and Lebanon, with children being the preponderance among the refugee population. Vulnerable populations (e.g., refugees) are prone to confronting inequalities of immunization coverage. Ideal immunization coverage is not always secured for various reasons, including, but not limited to, socioeconomic status, mother's literacy, and age of the child. Policy reform on the uptake of immunization rates of refugees would likely abate disparities in immunization coverage and other inequalities.

Ergo, increasing the HDI value of these host nations. Understanding the role immunization plays in exacerbating inequalities could be critical in health intervention strategies and for achieving equity in health care for refugees.

Refugees have narrow access to healthcare. Regardless of whether a refugee has medical insurance, public hospitals are lawfully bound to serve them. However, there is no such thing as a free lunch; Syrian patients are forced to pay 25 percent of the costs of individual healthcare. In tandem, the Ministry of Social Affairs, UNHCR, and various NGOs subsidize 75 percent of secondary health care, leaving refugees to cover the remaining 25 percent in order to receive aid. The considerable needs of refugees and their inability to pay 25 percent has placed a grave encumbrance on public hospitals. This burden has prompted public hospitals to refuse to admit Syrian refugee patients. Refugees are coerced to make arduous decisions because subsidized care does not include non-life threatening injuries and chronic diseases, as well as the accompanying fee of obtaining a vaccine. The healthcare system in Lebanon and Jordan has taken a toll from the refugee crisis; due to the increased demand on hospitals, the quality of services awarded to refugees has been eroded, and rancor toward refugees continues to grow at an exponential rate.

However, Table 1 is unrepresentative of immunization rates in refugee camps. The scope of the literature on this topic is scant. A lion’s share of the research was conducted within Syrian refugee households in Jordan and Lebanon. With the rate of refugees in Jordan Lebanon ever-increasing, this is not representative of present-day immunization rates because refugees are still viewed as “guests” in host nations. Internally, this is a generational issue; more refugee children are being born in camps and households that are unaccounted for. The findings from Roberton et al.’s affirmed that Lebanon had higher recorded vaccination rates for polio compared to Jordan. Many factors could contribute to this discovery; however, this research claims that nationwide immunization campaigns are to thank for higher immunization rates.

A modern strategy in improving the uptake of immunization programs among migrants and refugees is triumphantly targeted in immunization campaigns. In consideration of the foregoing, it is of the utmost importance to always record the vaccinations on EPI cards received during national immunization campaigns. More Lebanese children in Robertson et al.’s study were vaccinated and this could be because of the reemergence of the poliovirus in Lebanon in 2013. Lebanon was one of eight countries in the Middle East who developed a polio outbreak response plan; Jordan did not generate a polio outbreak response plan despite being at notable risk. With torrent quantities of Syrian refugees relocating to Jordan, this was not a rational response to control the spread of polio to Jordan.

During 2013 and 2014, a myriad of nationwide vaccination campaigns were conducted in Jordan and Lebanon. During these campaigns, vaccinations were invariably undocumented on children’s EPI cards. That being said, some children who do not have the polio vaccination logged on their card today may, in fact, have received the vaccination. Inadequate immunization rates of refugees boost the risk of impending outbreaks, thus endangering children's’ lives and retrogressing global eradication efforts of infectious diseases.

Thus far, only smallpox has been declared eradicated by the World Health Assembly. Therefore, sanctioning the halt of routine smallpox immunization worldwide. Potentially, other infectious diseases could be eradicated with the proviso that an effective vaccine and specific diagnostic tests are readily available. Eradication requires high levels of population immunity in

all regions of the world over a prolonged period with adequate vigilance in place by enmeshed organizations. Refugee camps are propagation grounds for infectious diseases and despite a large cluster of NGOs dedicated to the betterment of refugees, not enough is being done to curb the emergence of infectious diseases in refugee camps. For this reason, nationwide immunization campaigns are a useful strategy for increasing immunization uptake because it requires stakeholders to take accountability. Nevertheless, assuring adequate immunization coverage for refugees needs to be an overarching, primary goal for global health governance systems and should be factored into the health sector of a nation's HDI value.

Conclusion

There is a lack of research on the immunization rates of refugees, let alone the dearth of nationally representative samples of the immunization rates of Syrian refugees. The lone journal that — to a certain degree — ticked-all-the-boxes was Roberton et al.'s study, which was limited solely to Syrian households in Jordan and Lebanon who had lived in their respective host country from 2011 onward. It is imperative for researchers who seek to repeat this study in the future to administer the survey exclusively to undocumented Syrian refugees.

It has not escaped our notice that all tools of measurement have stakeholders and particular points-of-view in fulfilling objectives. Illuminating the creation of the HDI as a measurement tool — constructed by the UNDP — is suggestive of the HDI's inherent disparate intentions. In comparison with other measurements of inequality, the HDI asks questions regarding health, education and quality of life. This goes beyond the scope of most apparatuses used by sociologists as a means of encompassing the qualities of a nation. The HDI pertains to the experience of being human, instead of income or national level inequality. The HDI value of nations and immunization rates overlap in various types of ways. Understanding the measurements used to calculate inequalities, elucidate how to better coordinate with overlapping NGOs and IGOs. To coordinate action on a fundamental level, stakeholders need purposeful and multidimensional tools of measurement to understand where to position themselves.

This paper encourages the revision of the HDI. The significance of the immunization of refugees has increasing relevance and is clearly highlighted in the albeit exiguous, contemporary literature. One may ponder, how pragmatic is the HDI truly? Potentially, the HDI opens the floor to multitudinous questions beyond money. Per contra, the HDI is concurrently too focused at the macro level to probe into individual mechanisms. For this reason, researchers must examine other tools of measurement, given that vaccines are a global issue.

The HDI's center locus of health is more representative as a tool for policy and macro comparison because it does not solely use income as a measurement of development. Considered in this framework, scrutinizing the immunization rates of refugees may perhaps assist in perceiving additional issues necessary to conceptualize in global inequality. This report argues that the revision of the HDI to subsume immunization levels would create a more representative and fruitful statistical composite index.