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HLTH4700
30 November 2022

Global Health Paper

Ghana is a country, slightly smaller than Oregon, in West Africa that borders the Atlantic Ocean. Neighboring countries of this nation include: Togo, Burkina Faso, and Côte D'ivoire. Approximately 33 million people live in Ghana and it is classified by the World Bank as a lower-middle income country. Most people of this nation are of the Akan ethnic group and spoken languages other than English include: Asante, Ewe, and Fante. Because of its location, Ghana has a relatively warm and tropical climate, and relies heavily on agriculture, oil, and natural gas as their main economic industries. Some notable natural resources found in this country are gold, industrial diamonds, fish, rubber, and petroleum (Central Intelligence Agency [CIA], n.d.).

According to the UN's Sustainable Development Goals (SDGs) Ghana's SDG Index Score is 63.44. This means that the country has achieved 63% of the total amount of SDGs set forth by the United Nations (United Nations [UN], n.d.). The SDG that most pertains to the field of Global Health is SDG 3: Good Health and Well-being, and can be described as "ensuring healthy lives and promoting well-being for all at all ages". According to the SDG dashboard for Ghana major challenges remain for the achievement of this goal, and the indicators that need the most work are adolescent fertility rate and traffic deaths (United Nations [UN], n.d.). From this, one could conclude that these major threats are among the reasons that could prevent Ghana from reaching SDG 3 achievement by 2030.

Traffic accidents have been an issue in Ghana for a long time (Hesse & Ofosu, 2014). Between 1991 and 2011 alone the rate of road traffic accidents increased from 11 to 20 per 100 accidents (Hesse & Ofosu, 2014). As of recently, in 2019, transport injuries had a rate of 19.81

deaths per 100,000 (GBD compare, 2020) The issue has also been exacerbated by the lack of emergency care services available in the country (Teye-Kwadjo, 2019). This trend is not seen in Ghana alone because according to the World Health Organization (WHO) more than 90% of road traffic deaths occur in low- or middle- income countries (World Health Organization [WHO], 2022). It is the leading cause of death for children and young adults between 5 and 29 years old, and males are disproportionately affected by them because they are more likely to be in a road traffic accident than females (WHO, 2022).

Teye-Kwadjo (2019) explains that cultural norms and standards heavily affect the driving culture in this nation. There has been rapid motorization in Ghana, as more and more people drive for work, and among these workers are a lot of young people. This comes with consequences as their capabilities might not be as strong as others on the road. The study conducted in this paper further highlights the risky driving culture that exists in Ghana, and contributes to the high amount of road traffic accidents seen.

In the Teye-Kwadjo (2019) study, surveys were given to 519 commercial and private vehicle drivers between the ages of 18 and 73 about various traffic topics to gauge perceptions and norms surrounding driving. These 4 topics were traffic fatalism, traffic risk perception, attitudes towards risky driving, and self-reported risky driving behaviors and data was collected through questionnaires. The results of this study found that fatalistic beliefs about road traffic crashes were positively associated with risky driving attitudes, meaning many in the group found fate to be an important factor of risky driving attitudes. Further results state that the findings from this study are concurrent with many others that state this trend. Cultural meanings were also given to certain ideas surrounding accidents, for example, if a person became wealthy due to witchcraft they would die in a car crash. Another notable result of this study was the correlation

between fatalistic traffic beliefs and self-reported risky driving behavior. Findings included that since fatalistic beliefs and risk taking attitude were related, self-reported risky driving behavior was as well. These results help to justify and explain the culture surrounding driving in Ghana and give key information to intervention strategies that could be implemented to decrease the amount of road traffic accidents that occur.

Suggestions for intervention given by the author of this study include focusing on programs to be implemented by the National Road Safety Commission (NRSC), Ghana's state agency that is responsible for traffic regulations and road safety. Some of these interventions include: crash reduction programs that focus on the antecedents of attitude information, periodic refresher training programs for drivers on seat belt use, traffic regulations, and other important road rules (Teye-Kwadjo, 2019). Another study, focusing on barriers to the enforcement of seat belt laws in Ghana, suggests that consensus building amongst all sectors of law enforcement and the government will also aid in the increased regulation of traffic rules (in this case seat belt wear) (Okyere et al., 2021). Based on the evidence shown, other interventions that would be beneficial in decreasing the rate of road traffic accidents could be teaching about road safety in school, holding more testing for the obtaining of a driver's license and stricter laws for violations of traffic rules and regulations.

Adolescent fertility rate is also a big issue for Ghana in terms of achieving SDG 3. This is alarming due to the various developmental issues young girls might face as a consequence of having children so early (Nyarko, 2013). Currently on the dashboard major challenges remain and the score is decreasing. As of 2018 there were about 78 births per 1,000 females aged 15 to 19 and the long-term objective of this indicator is 2.5 (UN, n.d.). This shows how long of a journey the nation has to try and reduce the number of adolescent females giving birth.

A 2013 analysis of a 2008 study explains the determinants that lead to an increase in adolescent fertility (Ghana Statistical Service [GSS] et al. 2015). The 2008 data was taken from the Ghana Demographic and Health Survey (GDHS) data set. This is a nationally representative survey of men and women that was initially created to gain relevant and reliable information about various health topics such as: fertility, family planning, maternal and child health, and more (GSS et al. 2015). Out of the 1,037 girls aged 15-19 who participated in the survey, 106 of them had given birth at least once before the survey. Birth rates were also highest among females who had no formal education (24.1%), working female adolescents (22.7%), female adolescents from poor households (57.5%), and female adolescents who were not exposed to the medi (13.4%). Only five of the 13 independent variables were found statistically significant with adolescent fertility and these included: level of education, woman's work status, weal status, and media exposure. These findings provide a solid basis for the focus of potential interventions, as they show some key reasons as to why adolescent fertility rates in Ghana are so high. Conclusions from this research paper state that it is imperative that interventions are targeted toward child, specifically girl child, education along with adolescent sexual and reproductive health education to help effectively address this issue.

Intervention strategies to decrease adolescent fertility rate should focus heavily on education, as previously stated. Studies have shown that an increased education level for a female correlates to a decrease in fertility (National Research Council, 1993). This could be due to the fact that getting an education requires more time commitment, as well as, higher education can mean more knowledge about safe sex practices and family planning. It is clear that in order to address this issue in Ghana interventions must be based on education such as: infographics used for social media marketing, classes taught in schools about family planning and safe sex

practices, and overall ensuring that young women are going to school and getting an education. An example of an evidence-based strategy is the SIRIAN program implemented in Barcelona, Spain in the early 2000s. This program consisted of community counseling sessions that provided access to contraception, and increased knowledge and sexual health care in generally harder to reach populations (Diez et al., 2020). The first intervention group's rates were 27.90 per 1000 women 15-19, and about 6 years after their rates greatly declined. A replication of this program in Ghana could yield the same results and ultimately aid in the issue of adolescent fertility rates.

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