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## **COVID 19 Vaccine**

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# **COVID 19 Vaccine**

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#### Covid 19

In 2020 the nation experienced its first worldwide Pandemic since World War Two. A worldwide pandemic is a spread of a new disease. During WW2 and post WW2 the nation-state experienced a similar pandemic as the nation-state is experiencing today. That virus was known as the plague stretch. <sup>1</sup> This disease caused many individuals to pass away because few individuals knew what the condition was, how it affected people, and how to prevent it. A new worldwide pandemic has recently caused many individuals to experience the same factors that our nation has seen in earlier years. Unlike the last pandemic, this new Pandemic has more informational facts that doctors and scientists can study, ultimately helping society get back to a new norm. Even though this new Pandemic has hit our nation harder in specific areas, such as the economy, society, our daily means, and our physical and mental health,<sup>2</sup> we as a nation have come together to become even stronger. By coming together as a nation, we have seen scientists develop a vaccination on this new disease in a matter of a year, and this is the fastest vaccination made in history. Having developed this recent vaccination quickly gives the nation a way to bounce back quickly from this worldwide Pandemic and create a new norm of living.

COVID 19, also known as SARS-CoV-2, is a new strain of the disease that has caused a global pandemic starting in 2020. COVID 19 was first discovered in a seafood market in Wuhan, China. <sup>3</sup>The first case of COVID 19 came when an individual became extremely sick with a high fever, sweats, headaches, and had trouble breathing. Though doctors did not realize what was

<sup>&</sup>lt;sup>1</sup> Chakraborty & Maity, 2020

<sup>&</sup>lt;sup>2</sup> Verma & Prakash, 2020

<sup>&</sup>lt;sup>3</sup> Verma & Prakash, 202

causing these issues, they finally realized that COVID was generated from the ingestion of a specific animal type served at the seafood market. For many individuals who became sick with COVID 19, their symptoms include but are not limited to issues breathing, smelling, tasting, coughing, high fever, chills, headaches, and fatigue.<sup>4</sup>

The Covid Pandemic has affected the nation in many ways, such as lifestyle, economy, education, socially, physically, and mentally. Through my research, I will supply data on the effects of COVID 19 and how it has changed the nation. I will also supply information on how the country is becoming a healthier society while experiencing new norms. This research will assess the challenges the government has faced through the Pandemic while also supplying a positive outlook on the vaccination process. This research will be connected to specific Sustainable Development Goals, such as partnerships, inequalities, healthier living, economic growth, and education. This information will supply knowledge to individuals on the benefits of COVID 19 vaccinations, and how the nation's, first responders, medical personnel, and other organizations work together to form a new norm in society through the vaccination of COVID 19.

The Global Pandemic of COVID 19 has played a significant role in our new norm of living. Since the Pandemic hit, there have been 4.3 million positive cases of COVID and over 290,000 deaths nationwide. <sup>5</sup> COVID 19 developed an economic crisis, which led the nation to go on mandatory lockdown and have mandated restrictions such as social distancing from others, many states went into mandatory curfews, airlines had to shut down, which caused travel restrictions for individuals who traveled for work. This led to many individuals losing their jobs. Also, many individuals could not pay their workers, others are not paying rent on their business,

<sup>&</sup>lt;sup>4</sup> Atar & Atar,2020

<sup>&</sup>lt;sup>5</sup> Atar & Atar,2020

children have lost out on different interactions through the school environment, and finally manufacturing has declined. The effect of manufacturing products causes a decline in our economy's growth due to the lack of specific products. On the positive side of the pandemic, the nation has experienced a significant increase in medical supplies and food products. The COVID-19 Pandemic has increased these two categories due to individuals being isolated in their homes which have caused increased consumption of groceries and increased need for medical supplies for COVID-19 testing and treatment. Throughout this pandemic, researchers have not only noticed changes through schools, jobs, and work but have also focused on investments, finances, consumption, and other services. Researchers have found that there has been a \$113 billion (about \$350 per person in the US) loss in revenue; this number accounts for over 20 percent of the global revenue. <sup>6</sup>

Researchers have found through their observation of 214 cities in China that there was a 32 percent reduction in retail stores and services. In Wuhan, where COVID-19 was first discovered, their reduction rate for retail stores and other services was 70 percent. Due to reduced services and retail stores, stock market personnel indicate a 20% loss due to the lockdown.<sup>7</sup> In the United States, banks have noticed a 56% rise in personal spending; the cause of individuals spending more money through this Pandemic is caused by groceries' stockpiling. Even though researchers have found that supermarkets' revenue has risen about 39% from February to March of 2020, researchers have found that many individuals are turning to online shopping due to social and economic fear and risk beliefs.<sup>8</sup> Many powerful countries such as the United States and China face unemployment rates, With the Pandemic having the country on lockdown, studies

<sup>&</sup>lt;sup>6</sup> Ozkan & Mulazmogullari 2020

<sup>&</sup>lt;sup>7</sup> Ozkan & Mulazmogullari 2020

<sup>&</sup>lt;sup>8</sup> Ozkan & Mulazmogullari 2020

show that each month countries are on lockdown, they experience a 2% loss in economic growth. <sup>9</sup> As countries stay on lockdown to try and prevent the spread of COVID-19, tourism by itself has a significant crisis decline of 50% to 70% <sup>10</sup>due to airlines, cruise ships, hotels, and other tourism spots shut down due to COVID. The World Trade Organization (WTO) and Organization for Economic Cooperation and Development (OECD) have said that the COVID -19 pandemic is the most significant threat to the entire economic system since the Financial Crisis in 2008-2009.<sup>11</sup>

General education across the globe has faced challenges throughout the COVID-19 lockdown; education systems from early childhood to colleges and universities have had to convert to online learning because of social separation. With many states such as Georgia having traditional and modern learning curriculums, it was challenging for students and academic staff to convert to online learning. In the spring of 2020, Georgia became one of the 188 countries to suspend education and shut down all afterschool activities. The worldwide shutdowns of schools to prevent the spread of COVID have affected approximately 1.576 million children (about the population of West Virginia) and youths, which account for 91.3% of the world's student population. <sup>12</sup>

During the 2020 academic year, the country was calculated to have around 592900 students (about half the population of Hawaii) in 2,313 schools. This number includes 2086 public schools with 530,100 students and 227 private schools with 62,800 students <sup>13</sup> With more than half the population of students in the country, educators and school curriculums had to turn to

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<sup>&</sup>lt;sup>9</sup> Charkaborty & Maity, 2020 <sup>10</sup>Charkaborty & Maity, 2020

<sup>&</sup>lt;sup>12</sup> basilica, & Kvavadze, 2020

<sup>&</sup>lt;sup>13</sup> basilica, & Kvavadze, 2020

virtual learning. This was challenging to some communities, such as lower-income communities, because owning a computer was lower than 50%, but for urban neighbors, it was easier to adapt to online learning due to 74.6% of individuals having access to computers. <sup>14</sup>

As many states in the country struggle to adapt to online learning, other counties such as Georgetown County in South Carolina have 60,000 residents in the community. The community residents range from 64.5 percent Caucasian, 31.8 percent Black/ African American, and 3.7% other. The county's total income per person is \$26,000 a year, leaving most low-income population individuals.<sup>15</sup> According to the United States Census Bureau 17.5% of families living in poverty in Georgetown County, it is a struggle for those residents to access a computer or internet for the child to do schooling.<sup>16</sup> Students who struggle and need aid in some of their educational activities getting back to face learning these students seem unrealistic. With many cities, states, and countries still fearing the Pandemic and having precautions still in place, this gives a hopeless feeling to students, even students who have graduated, that the new norm will have no opportunities for them.

Throughout the COVID 19 pandemic, not only did we see an impact on our educational system and economy, but the world experienced over 2 million deaths due to COVID 19globally. COVID 19 is the leading cause of death among adults. As a result of these deaths, scientists rapidly developed a vaccination within a year. The development of the COVID 19 vaccination brought hope and concern about how well the vaccination could help fight the Pandemic.<sup>17</sup> With the COVID pandemic rapidly spreading, vaccination availability is in high demand, as many

<sup>&</sup>lt;sup>14</sup> Basilaia & Kvavadze, 2020

<sup>&</sup>lt;sup>15</sup> <u>http://seegeorgetown.com/demographics/</u>

<sup>&</sup>lt;sup>16</sup> <u>https://www.census.gov</u>

<sup>&</sup>lt;sup>17</sup> Caspi,2020

countries and states have limited supply to the vaccination. This leaves many states and countries prioritizing who will receive the first supply of vaccinations first—many countries such as Israel decided to vaccinate the elderly first and healthcare workers.

The reason behind vaccinating the elderly first is their elevated risk of getting COVID and having a 95 percent mortality rate of 50 and older.<sup>18</sup> Israel also concluded that many municipalities with lower socioeconomic status would face challenges to receive the vaccination. Individuals in lower socioeconomic status have resources for healthcare. Unfortunately, this situation leads to poorer health and lower acceptance of the vaccine.<sup>19</sup> Due to 34.0 million individuals (about twice the population of New York) in poverty worldwide, researchers have concluded that populations with lower SES (socioeconomic status) are at a higher risk factor, specifically two times higher than the average individual for COVID-19; This is due to the lack of health resources they can receive.<sup>20</sup>

Currently, Israel has led the globe in distributions of the COVID 19 vaccine within their population. Having such success with the distributions of the vaccination in Israel, other countries find themselves doing case studies of Israel's vaccination process to collect data, knowledge, and strategies on how it has been so influential.<sup>21</sup> Even though Israel has been so effective in getting their country vaccinated, other factors have a role in why Israel has been so helpful. Israel is ahead of every other country COVID-19 vaccination due to their country having

<sup>&</sup>lt;sup>18</sup> Nania 2020

<sup>&</sup>lt;sup>19</sup> Caspi 2020

<sup>&</sup>lt;sup>20</sup> <u>https://www.census.gov/library/publications/2020/demo/p60-270.html</u>

<sup>&</sup>lt;sup>21</sup> Caspi, 2020

a smaller population. Younger individuals within the country and politicians push the programs forward instead of dragging the process along and finally a more robust public health system.<sup>22</sup>

As government officials across the globe try to roll out their vaccination process, many are turning to Israel to learn from their process; within the first two weeks of vaccinations in Israel, they vaccinated 1 in 10 individuals within the community since the vaccination has been offered.<sup>23</sup> Even though Israel is ahead of other countries, the United States and Europe still struggle to get the vaccination process going. With the struggle of the United States and Europe's vaccination program, <sup>24</sup> One of the reasons why Israel has been so valuable for distributing the vaccine is a massive vaccination plan. This includes getting an adequate number of individuals to get vaccinated, not overstocking on the vaccine, and having the vaccine appropriately transported from the site. Unlike Israel, other countries initially did not understand how the process and distribution of the vaccine worked. Other countries overstocked on the vaccination, did not have a particular structure within the facilities, could not support a valid registration number of the population, and did not have the proper number of administrative staff to distribute the vaccine<sup>25</sup>.

Within the United States the vaccination process has encountered many challenges with the distribution of the Covid vaccine. An interview on April 1st, 2021, with Dr. Gerald Harmon, who was elected to the American Medical Association Board of Trustees in June of 2013, and elected board chair in 2018. In addition, Dr. Harmon also served as the secretary of the AMA in 2016. Dr. Harmon stated, "The challenges with the vaccination distribution public fear, Individuals form a terminology called vaccine resistance where that individual will never get vaccinated."

<sup>24</sup> Mckee 2021

<sup>&</sup>lt;sup>22</sup> Mckee 2021

<sup>&</sup>lt;sup>23</sup> Mckee 2021

<sup>&</sup>lt;sup>25</sup> Mckee 2021

Another issue with public fear and the vaccination rollout is society being hesitant to get vaccinated because of how rapid the vaccination period took to develop. Having the vaccination made quickly these individuals tend to get anxiety and are not fully trustworthy of the vaccine. Though many individuals around the globe are hesitant to get vaccinated, the benefit individuals do not understand is that once vaccinated one forms a herd immunity, which means an individual cannot spread the virus to someone else. Another benefit Dr. Harmon Points out is that the vaccination is better to receive compared to the virus because the vaccination will allow you to make more antibodies."

As COVID 19 vaccination is in high demand, cities like Georgetown County partner with Tidelands Health, to organize a strategy on how to administer the COVID-19 vaccination. Having certain policies in place helped Tidelands Health vaccinate 18,000 individuals (about the seating capacity of Madison Square Garden) within the first month of distribution. Though the policies are formed throughout other organizations such as DHEC. Recommendations and what they expect, combined with how Clinical leaders look at how the technology gets put out, meaning; Tidelands must follow state and federal guidelines but also learn how to adapt it locally. Finally, the one policy that was hard to figure out was how to give the dose in advance. The COVID 19 Vaccination you have two doses one is either 21 days (about 3 weeks) apart which is Pfizer, or the other dose would be Moderna which the wait time for the second dose is 28 days (about 4 weeks). Though these two vaccines are identical in how it works the only difference is storage time and shelf life. Once Tidelands health figured out how to adapt the dosages, the process became easier and led South Carolina to be in the top 5 states in the US to minimal cases.

Overall, with Tidelands Health using separate ways to reach out to the public (such as videos, seminars, social media, and social clubs) to guide the public with information about

Covid vaccination there have been lower rates of Covid cases, lower hospital census eight inpatient compared to 70-80 inpatient this summer. Having the vaccination is allowing for minimal cases which is allowing schools to reopen, businesses to succeed, and individuals being able to interact again. Through this pandemic, the nation has seen weakness that our economy was not ready for, but this has strengthened our healthcare system not only with knowledge but technology too.

The Sustainable Development Goals are 17 strategies passed in the UN General Assembly in 2015 for all United Nations members. These goals are to help improve health and education, reduce inequalities, combat climate change, and promote economic growth. These blueprints are designed to develop a better and more sustainable future. One organization In Georgetown County that contributes to SDGs (Sustainable Development Goals) is Tidelands Community Care Network. It was developed to help individuals in the community experiencing low-income wages, single-family households, individuals who suffer from addiction, people living with diabetes or sexual assaults, or individuals who have trouble getting around. For example, the mission of TCCN is to supply easier access to uninsured individuals who are 19 and older. TCCN has grown into a multi-sector organization with over 167 organizations across the globe. The Community Care Program is aimed to improve community wellness in low-income communities, such as Georgetown. TCCN helps provide individuals who live in low-income/ single-parent households or any individual struggling with poverty problems access to affordable health insurance. This insurance covers breast cancer, colorectal cancer, lung cancer, hepatitis C and diabetes. TCCN also provides individuals with other programs besides health insurance. Some other programs Tidelands Community Care Network supplies services such as expectant families and newborns. This program helps families that are expecting a newborn with classes

and parenting skills. Some classes that families could attend are breastfeeding classes, childbirth classes, CPR for new parents and grandparents, infant care classes, location consultations, and sibling classes.

During this class, families will be sent home with a gift basket of baby lotion, baby wash, diaper cream, breast pads, baby wipes, diapers, a blanket, formula/breast milk card, and a safe sleep baby book, along with other educational materials. Another helpful program that TCCN provides is the Triple P Program; This program is designed to help parents with children from their toddler years to their early adolescent years on specific strategies to build a more robust and healthier relationship. The program addresses many topics that can help through parenting challenges, such as behavioral issues. The Triple P Program's main goal is to deny access to problems that may occur in families, schools, and communities before they even begin. Parents and their children could enroll in either a one-on-one program or a group program, and if completed, these individuals will create a better family environment and give the adolescent confidence to be successful.

In 2020 when the COVID 19 pandemic hit the world, TCCN provided individuals in their community who tested positive for COVID with take-home kits. Giving the individuals who could not afford proper sanitization a kit that installed proper hygiene; in these kits was a thermometer, two masks, hand sanitizer, an education pack on COVID 19, and how to stay safe, along with Alcohol wipes and a blood pressure kit. Finally, the last program TCCN offers is a class on how to prevent diabetes. In this class, there are presentations on eating healthily, checking their sugar, and staying active. Along with this four-month program, individuals will have access to scales, blood pressure kits, glucometer, strips, lancets, alcohol wipes, diabetes my plate guide, how to eat healthily, and how to thrive diabetes information packet.

Along with these programs, Tidelands has access to different services as well. These services include mental health, support groups, counseling, and comfort support through a severe illness, fitness programs, memberships to the YMCA, and transportation. Through these programs and services, those in lower-income households can partake in services that may not have otherwise been available to them.

As Georgetown County has one of the higher rates of poverty in the state, this program gets a certain amount of funding each year. This funding includes certain restrictions, such as if individuals do not attend the programs, they will be terminated from the program. Though many of these residents stick with the program, and the turnaround rate is not low. These residents stick with the program because they trust and respect the workers for putting in their time to help them. As a result, TCCN has supplied and helped their community in many ways, not just through their services and programs but also through the COVID 19 pandemic. With Tidelands Community Care Network being so involved in the community, their programs, resources, and services have carried out six of the seventeen Sustainable development goals.

The six Sustainable Development Goals that Tidelands Community Care Network provide within their program are,

- Goal 1- No Poverty,
- Goal 3- Health and Well-being,
- Goal 8 Economic Growth,
- Goal 10- Reduce Inequalities,
- Goal 11- Sustainable cities and Communities, and finally
- Goal 17- Partnership.

Each of these SDGs has a role in The Community Care Program. Goal number 1 no poverty is provided through the community care network by ensuring all people, particularly the poor, have equal access to the proper economic resources and essential services (goal 1.4). Tidelands relate to this goal by giving Georgetown country residents who are in low poverty the chance to gain access to health care and other essential community resources one may need. In goal 1.5 relates closely with Tidelands Triple P program, also known as Positive Parenting Program and Newborn and Expecting families,

The goal helps build resilience in vulnerable situations such as environment shock and social and economic shock. The Triple P program and the Newborn and Expecting Families program related to these goals because both programs guide and educate parents on how to become a better parent and what to expect with a newborn. One difference The Triple P program has compared to Newborns and Expecting Families is that the Triple P Program connects parents with their child. This allows them to better understand where the child is coming from. Which allows for a closer relationship between the parent and the child.

Goal #3, health and well-being is related to the Tidelands Community Care network program. It encourages pre-diabetic individuals to attend seminars on preventing diabetes by eating healthier, exercising, and gaining knowledge on what diabetes is. Not only does Tidelands offer seminars on diabetes, but they also offer services such as treatment centers, counseling, and training. In Goal 3.5, Tidelands' strengths are the prevention of abuse or addiction. Tidelands provide the community with a spreadsheet full of resources that they have access to. Along with 3.5, 3C is supported throughout Tidelands as well; 3C is shown through helping individuals afford health care through grants instead of having individuals pay out of pocket. Also, 3C shows new employees' development and training, and Tidelands shows this goal through new employee orientation books and seminars on their different programs they offer.

Finally, Tidelands supplies health and well-being by attending COVID 19 vaccination clinics. This section of Tidelands goal 3B is involved, 3B and Goal number 17 Partnerships are shown through the support and development of the COVID 19 vaccine. Tidelands organization works with different organizations such as the National Guards and DHEC (Department of Health and Environmental Control) to gain access to the COVID vaccine. Once Tidelands has access, they partner with other medical field groups to start giving out the vaccines. Allowing individuals to access these resources will help keep the community safe and prevent high mortality rates.

Work and Economic Growth is Goal 8; Tidelands shows three sections of goal eight. These sections include 8.5 to ensure full and productive employment for both men and women, including young people and persons with disabilities, and equal pay for equal value work. The community care network shows this goal by providing individuals with the guidance they need through resources and after school activities. Though Tidelands does not directly affect getting employment for the young, men, women, or individuals with disabilities, Tidelands does supply these individuals the resources they need to pursue that path. In section 8.6 reduce the proportion of youth in employment, education, and training. With Georgetown Country being extremely poor, many children without a job, low education skills, and few life skills. Through Tidelands, the youth will attend programs at the local YMCA that can include interactions with others, sports, fitness, or swimming. Allowing the youth to get involved in the YMCA program will allow a future for children who did not believe there was one. 8.10 is to strengthen financial issues, Individuals in Georgetown may not be able to afford health care, but Tidelands Community Care Network Provides these individuals with a chance to gain health insurance through certain financial services such as grants.

Goal #11, Sustainable Cities and Communities relate to The Community Care Network by ensuring all individuals have essential resources and services, 11.2 Tidelands supplies affordable transportation for individuals who have disabilities or cannot drive themselves to everyday life activities 11.5 reduce the number of deaths. These sections could relate to Tidelands Community Care Network because they do not just have one sustainable development goal. They have access to many. Even though it is hard to prove that Tidelands can reduce the number of deaths in the community, it is not hard to prove that this network, alongside other organizations, gives access to the public to prevent illness, inequalities and help economic growth, Tidelands Community Care Network alongside its partnerships with other organizations help make for a sustainable community.

Through this program, individuals will educate, gain knowledge, form relationships, and see the bigger picture in life. Each program, seminar, and service will always relate to Sustainable Development Goals because Tidelands Community Care Network is resilient for a better future.

Throughout the COVID 19 Pandemic, South Carolina has had 537,498 confirmed cases of COVID. About 8,938 are mortalities. With Georgetown County being a low-income city within South Carolina, 60,000 individuals and about 18.5% are in poverty. Their census of COVID 19 cases is 6,383 confirmed cases with a mortality count of 136 individuals. As Georgetown countries are still struggling to reclaim a new norm, vaccinations are underway to help build a healthier community and achieve herd immunity. The vaccination process has been

put in place that has led to positive attention within the community. Along with Tidelands Community Care Network, Georgetown County has vaccinated 17,000 individuals (about the seating capacity of Madison Square Garden) in the community, leaving 43,000 more individuals to receive the vaccine. With the COVID 19 pandemic still affecting our nation, many citizens are still trying to find a new norm. Through this Pandemic our future for a stronger sustainable community needs to be recognized at a higher standard than pre-pandemic.

As Georgetown County is an epidemic poverty city in South Carolina, future studies could collect Georgetown's data on how that city has dealt with inequalities throughout the Pandemic. Collecting data on individuals who suffer from a lack of resources within the community could further help the city by allowing access to the proper health care or resources one needs to survive in a pandemic. Tidelands Community Care Network brings opportunities for individuals who struggle with health care and access to proper resources. Allowing individuals to gain access to resources and their needs to survive will also help for a more sustainable community.

More than 50% of eligible Georgetown County residents -- 26,784 of 52,625 -- have received at least one dose of the lifesaving COVID-19 vaccine. Georgetown County now leads South Carolina in its rate of COVID-19 vaccination of eligible residents. This data proves that Tideland's education and outreach on COVID-19 Vaccination is guiding residents in the right path to a stronger and sustainable community. Some recommendations that the COVID clinic could use are more appointments because only 100 individuals show up to the clinic. Another suggestion would be to use networking skills within other community resources to promote the vaccination benefits. Utilizing different organizations and community resources to gain access to individuals' feelings on the vaccination and reliable data on the vaccine would help individuals

choose whether they want the vaccine. Tidelands Community Care Network could use its partnerships with other organizations and resources to fulfill an individual's needs. With all the information and programs Tidelands offers, one recommendation to get their programs out to the public is by holding seminars to discuss what their programs have to offer to low-income families. By having better communication, resources, data, and partnerships, Tidelands Community Care Network will be the future of sustainable development within the community.

Even though the nation has experienced challenges throughout this Pandemic, such as school closing, unemployment rates, high mortality rates, and isolation, our nation, and our communities are becoming resilient by focusing on the bigger picture, gaining a new norm. Tidelands Health supplies individuals a chance to get vaccinated, making our society more robust and resilient to another pandemic. Tidelands Community Care Network and its partnerships with other organizations help make for a sustainable community. Through this program, individuals will educate, gain knowledge, form relationships, and see the bigger picture in life. Each program, seminar, and service will always relate to Sustainable Development Goals because Tidelands Community Care Network is resilient for a better future.

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