



THE WORLD HEALTH ORGANIZATION

SHSMUN'20





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Introduction to Committee:

The WHO, known as the World Health Organization, is an organization known worldwide working alongside the UN in order to certify a healthier, enhanced, and safer future for people across the globe of different races, gender, religion, etc. They have been working, from more than 150 offices, with 194 Member States, across six regions. WHO staff are integrated in a common pledge and obligation to attain better health for everybody around the world. In 1948, the WHO was formed to manage health concerns within the United Nations. Its initial priorities were malaria, venereal disease and many other infectious diseases, in addition to women and children's nourishment and hygiene. Initially, it was associated with member states to categorize and direct known health topics, strengthen health investigations and declare guidelines. In addition to governments, the world health organization coordinated with other UN agencies, donors, NGOs, and the private sector. In 2003, the WHO, headquartered in Geneva as it was distributed and classified into 141 country offices that formed six regional offices. It employed about 8,000 doctors, scientists, epidemiologists, managers and administrators worldwide. The WHO's main roles are to function as a guiding and synchronizing authority on intercontinental health matters, to confirm legitimate and productive technical cooperation, and to endorse research. The WHO has always been working to assist governments, upon request, in consolidation of health assistances, promote biomedical and health services research, and several other goals it works on achieving. In the year 2017, the WHO accomplished many achievements such as yellow fever vaccination, abolishing Cholera in Yemen, and resolving the Somalia crisis. The WHO seeks to accomplish and solve many other crises currently tackling the world such as chemical safety, early child development, teenage pregnancy, hypertension, and the anti vaccination dilemma.

Topic 1: Effects of teenage pregnancy on human health

I) Introduction and History

Teenage pregnancy is when a teenage girl becomes pregnant, intentionally or unintentionally. Adolescent pregnancy is considered to be a significant, global issue because it affects girls' mental and physical health. The teenage girl goes through a harsh nine-month period after which she will have to take responsibility of a child which consequently affects her future. Adolescent pregnancy is a complex issue that calls for more education and support



to encourage girls to delay motherhood until they are completely ready. Adolescent pregnancy is a global problem that occurs in high, middle, and low-income countries. Adolescent pregnancies are more likely to occur in marginalized communities, commonly driven by poverty, lack of education, and work opportunities. Many countries are currently combatting this crisis by forming NGOs, but it seems that they are not able to prevail against this severe issue. In modern days, approximately 1.8 billion people are teenagers; 15% of those teenagers are living in undeveloped living routines where uneducated teenagers become pregnant. It has also been proven that more than half of the world population has become sexually active. Studies show that 49% of girls that are from the 85% of developed living countries get married before the age of 18; 10%-40% of these girls are pregnant. More than 18.5 million babies are born to teenage mothers. Adolescents, younger than sixteen, face four times the risk of maternal death than women aged in their twenties, and the death rate of their children is fifty percent higher. Health experts agree that pregnant adolescents require special physical and psychological attention during pregnancy and during the postnatal period for preserving their own health and the health of the baby. In some cultures, girls may face social pressure to get married and, once married, to have children. Additionally, adolescents face issues in gaining access to contraception, including restrictive laws and policies regarding provisions of contraception based on age or marital status. Adolescents also face barriers that prevent the consistent and correct use of contraception. Although they may be able to obtain contraceptives, barriers exist, including but not limited to pressure to have kids, stigma surrounding non-marital sexual activity and/or contraceptive use fear of side effects; lack of knowledge on correct use and factors contributing to discontinuation. For example, the hesitation to go back and seek contraceptives, because of negative first experiences with health workers and health systems, changing reproductive needs, and the changing of reproductive intentions. In some situations, girls may be unable to refuse unwanted sex nor to resist pressured sex, which tend to be unprotected. Sexual violence is wide-spread and it particularly affects adolescent girls. About 20% of the girls around the world experience sexual abuse as children or as adolescents. Inequitable gender norms and social norms that condone violence put girls at a greater risk of unintended pregnancy. An estimated sixteen million girls give birth every year, with 95% of these births occurring in developing countries making up 11% of births worldwide. However, global averages mask important regional differences. Adolescent pregnancy remains a major contributor to maternal and child mortality, and to intergenerational cycles of ill-health and poverty. Adolescent pregnancy increases the risk of pregnancy complications, low birth weight (LBW), mortality of infants, preterm delivery, and severe



neonatal surgeries. LBW (below 2500 g) is due to premature growth and retardation. Full eclampsia is often fatal, leading to immediate delivery of preeclamptic women. A random sample of 389 adolescent mothers born in 1983 showed a depression rate of 54%. 52.2% of pregnant women aged 19 or less admitted to alcohol usage, 31.6% admitted to marijuana usage, and 13.8% admitted to cocaine usage during pregnancy. Although the circumstances of adolescent pregnancy vary greatly, some commonalities stand out-younger bodies are not fully developed to go through the process of pregnancy and childbirth without adverse impacts. Adolescent mothers face a risk of obstructed labor higher than that of women in their twenties. Therefore, pregnancy and child birth are the leading causes of death for girls aged between 15 and 19, with low and middle-income countries accounting for 99% of global maternal deaths of children in these ages. Adolescent mothers (10 to 19 years old) also face higher risks of puerperal endometritis and systematic infections than women aged 20 to 24 years old. Additionally, 3.9 million unsafe abortions among girls aged 15 to 19 years old occur each year contributing to maternal mortality and lasting health problems. In some cases, rapid repeat pregnancy is a problem for young mothers, which presents further risks for both mother and child. Nutritional issues included skipping meals and eating junk food as well as not getting enough food, even though they were entitled to stamps from the government. In addition to this, immaturity and lack of knowledge also contribute to poor health. Adolescent pregnancy can also have negative social and economic effects on girls, their families, and their communities. Unmarried pregnant adolescents may face stigma or rejection by parents and peers and threats of violence. Similarly, girls who became pregnant before the age of 18 are more likely to experience violence within marriage or a partnership. Regarding education, school-leaving can be a choice when a girl perceives pregnancy to be a better option in her circumstances than continuing her education, or it can be a direct cause of pregnancy or early marriage. Because of early pregnancy or marriage an estimated 5% to 33% of girls aged 15 to 24 years drop out of school in some countries. Based on their subsequent lower education attainment, the girls may have fewer skills and opportunities for employment, often perpetuating cycles of poverty; child marriage reduces furthering earnings of girls by an estimated 9%. Nationally, this can also have an economic cost, with countries losing out on the annual income that young women would have earned over their lifetime if they hadn't had early pregnancies. There has been a considerable decline in the number of births in teens over the past decade. However, the change in the absolute number of births and pregnancies does not adequately indicate the incidence of teen pregnancy and childbearing because it does not take into account changes in the number of teen women. It also does not take into account the



number of women at risk, that is, the number of women who are sexually active. This is especially important for teenagers, only a portion of whom are sexually active.

II) Involvement of countries and NGO's

The WHO issued guidelines in 2011 with the UN Population Fund (UNFPA) on preventing or reducing poor reproductive outcomes and early pregnancies. These made endorsements for action that countries could take, with 6 main objectives:

- Decreasing marriage before the age of 18 years. Estimates suggest a 10% reduction in child marriage could contribute to a 70% reduction in a country's maternal mortality rate.
- Creating understanding and support to reduce pregnancy for girls under 20 years.
- Increasing the use of contraception by adolescents at risk of unintended pregnancy. If this need was to be met, 2.1 million unplanned births, 3.2 million abortions, and 5600 maternal deaths could be averted each year.
- Reducing coerced sex among adolescents.
- Reducing unsafe abortion among adolescents.
- Increasing use of skilled antenatal, childbirth and postnatal care among adolescents.

The WHO also published documents facilitating implementation and prioritization of adolescent's pregnancy prevention and health, including global standards for adolescent friendly health services and the Accelerated Action for Adolescent Health Guidance. To address the health sector's response to adolescents, the WHO produced Global Standards for Quality Health-Care Services for Adolescents and Core Competencies in Adolescent Health and Development for Primary Care Providers. The WHO provided support to UNESCO to develop the International Technical Guidance on Sexuality Education and Early and Unintended Pregnancy & the Education Sector: Evidence Review and Recommendations. The WHO is synthesizing its recommendations on adolescent sexual and reproductive health into a Compilation Tool. In addition to this, the WHO is committed to reaching the Sustainable Development Goals (SDG's) targets 3.1 and 3.2 associated with adolescence pregnancy and maternal mortality. It is also invested in the United Nations Secretary-General's Global Strategy for Women's, Children's, and Adolescents' Health, and is working in collaboration with partners to fulfill its goals. "Girls not Brides" is a global partnership of more than 100 civil societies committed to stop child marriage. As their sub goal "Girls not Brides", in collaboration with UNICEF, focusses on the protection of pregnant teenagers and taking care

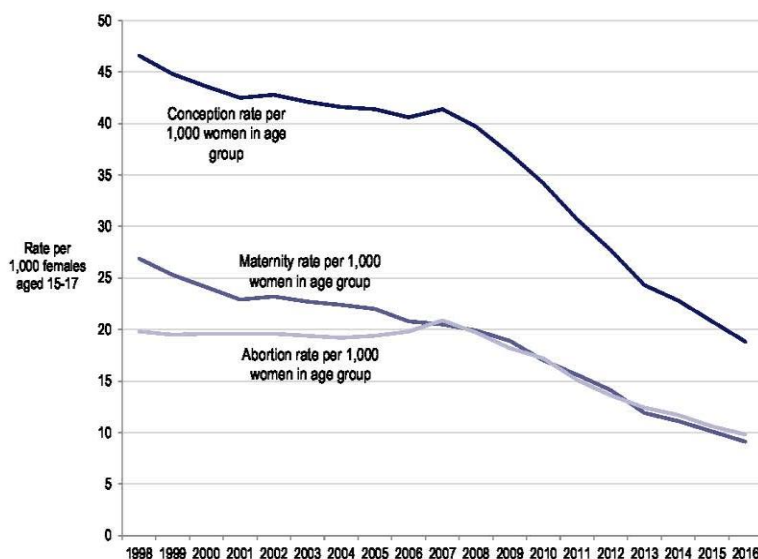


of the children that are born from those teenagers. Births to adolescents as percentage of all births range from about 2% in China to 18% in Latin America and the Caribbean. Worldwide, just seven countries account for half of all adolescent births: Bangladesh, Brazil, the Democratic Republic of the Congo, Ethiopia, India, Nigeria, and the United States of America.

At a strategic level the United Kingdom's teenage pregnancy prevention framework focusses on:

- safeguarding emotional health, wellbeing, and early help.
- integrating with Chlamydia screening and STI prevention.
- maximizing cost effectiveness of sexual and reproductive health services.
- giving every child the best start in life.
- breaking inequalities.
- helping address young people's alcohol and substance misuse.
- reducing future demand on health and social services.
- contributing to Public Health and NHS Outcomes.

A 59.7% national decline since 1998, but significant local variation



In England the under-18 conception rate has reduced by 59.7% between 1998 to 2016.

Niger has the highest rate of teenage pregnancy in the world and that is why the WHO focusses on that problem to stabilize the rate. Moreover, Niger does not put any effort on solving this crisis rather leaving NGO's to take care of it.



III) Possible outcomes

The number of teen pregnancies has risen, but because of that, the number of abortions has also increased even faster. As a result, the number of births has been declining. Both the number of abortions and the abortion rate increased by 50% from 1974 till 1980. Since 1980, the abortion rate and ratio have remained level. Birth rates have remained fairly level; rates for those who are sexually active have declined. Compared to Western European countries, the United States has a high abortion rate for young women. The United States also leads in the percent of abortion to teenagers. In spite of this, it also has the highest number of teens' birth. Levels of sexual activity are actually higher in Denmark than in the US. It is worth mentioning that Denmark has an excellent abortion reporting system. With a unique identifying number for each person and a centralized information gathering system, the data on abortion in Denmark are among the most complete in any nation. Two valuable lessons from this are that high levels of sexual activity do not necessarily result in high pregnancy rates, given adequate use of conception and that low birth rates do not necessarily imply high abortion rates; they may simply imply low birth rates. Low birth rates and low abortion rates are compatible. This suggests substantial differences between the US and other countries in choice of resolution for unplanned pregnancies. One way of resolving an out-of-wed teenage pregnancy is by marrying. So far, all teenage pregnancies have been lumped together. In fact, some 13% of all teenage births are post-maritally conceived, and such births are not generally considered to be problematic. Assuming that abortions indicate that a pregnancy was unintended, it can be inferred that most pregnancies to married women are intended. In 1979, Zelnik found that 53% of first births to women who were married were unintended. If the proportion of post marital births are added to a proportion of the miscarriages and to a small proportion of the abortions, it can be seen that between 15 and 20 percent of all pregnancies to women under 20 occur to married women. The remainder, 80 to 85 percent, are premarital pregnancies. The major reason for the large apparent increase in premarital pregnancy is the increase in sexual activity. There was an increase in premarital pregnancy among sexually active white teens, but not among black teens. The lack of increase among blacks is probably due to underreporting of abortion. Thus, premarital pregnancy has increased, but not as much among those sexually active as it appears from the increase in the population of teenagers. Data from the 1982 National Survey of Family Growth show a slight decline in premarital pregnancy among teenagers between 1979 and 1982, although the difference is probably not statistically significant. In 1982, 14 percent of all teen women 15 to 19 had never experienced a premarital pregnancy, compared



with 16 percent in 1979. Of those premarital sexually active teens, 30 percent experienced a premarital pregnancy. These figures substantially underestimate the true proportion of teenagers who become pregnant before they reach age 20 or marry because abortions are substantially underreported in surveys by as much as 50 percent. Some subgroups report more accurately than other subgroups. Unmarried black teenage females are the least likely to accurately report their abortions, with unmarried white teenage females only slightly more accurate. Older married white females are the most accurate reporters of their own abortions. Since accurate pregnancy estimates depend on accurate abortion reports, the reports of pregnancy obtained from surveys will be lower than those estimated on the basis of nationally collected data from organizations such as the Centers for Disease Control and the Alan Guttmacher Institute. Recent calculations from the latter that suggests on 1981 data about 40 percent of white teenagers and 63 percent of black teenagers would experience a first pregnancy before reaching age 20. The increase in premarital pregnancy over the decade of the 1970s was not due to an increased desire to be pregnant. Contraceptive use generally improved between 1971 and 1982. A smaller proportion reported never using contraception, a higher proportion reported always using it. The increase in rate of teenage pregnancy in the world poses a direct threat to people's health: teenage girls and their children have fallen victims to their lives which is causing poverty and increasing the rate of miscarriage. These effects put strain on people's healthcare systems. Therefore, it is of the utmost importance that all stakeholders in the medical world- physicians, researchers, educators, and governments- unite to curb the influence of the teenage pregnancy crisis. Many parents lack basic knowledge of how teenage pregnancy works as well as access to accurate information that leads to the harmful effects of this process. We must also effectively combat teenage pregnancy through social media and news platforms. Moreover, many countries that have a high rate of child marriage and teenage pregnancy should collaborate with NGO's to overcome the crisis. Therefore, to combat the teenage pregnancy crisis, there must be a strong emphasis on helping parents to ban their children from pregnancy if not able to contact NGO's.

Finally, many ways could be considered to stop teenage pregnancy; however, the most effective way is sexual abstinence which is a process in which teenagers or any human being practices to refrain from sexual activities. If teenagers are not forced to restrain themselves from sexual activity, then raising awareness to parents and teenagers is a must. Pregnant girls and adolescents also face other health risks and complications due to their immature bodies. Babies born to younger mothers are also at greater risk. For many adolescents, pregnancy and



childbirth are neither planned, nor wanted. In countries where abortion is prohibited or highly restricted, adolescents typically resort to unsafe abortion, putting their health and lives at risk. Some 3.9 million unsafe abortions occur each year to girls aged 15-19 in developing regions. The international evidence for reducing teenage pregnancy is clear by the support of the UK and some EU member's research. Building the knowledge, skills, resilience and aspirations of young people and providing easy access to welcoming services, helps them to delay sex until they are ready to enjoy healthy, consensual relationships and to use contraception to prevent unplanned pregnancy. An open culture and ease of parental communication around sexual issues are also associated with lower teenage pregnancy rates. The knowledge from the last 18 years has shown that working on parent and teen partnership is vital. For effective local delivery, health, education, social care, and safeguarding, agencies need to understand the relevance of healthy relationships and teenage pregnancy to their own priorities, and how they can contribute to the solution. Effective relationships and sex education need a 'whole school' approach to provide a positive and supportive environment outside the classroom. Building young people's resilience needs a family, community and service response. The prevention of teenage pregnancy also requires a whole system approach.

IV) Questions to consider

- Does your country have a high rate of teenage pregnancy?
- How is your country working on minimizing the rate of teenage pregnancy?
- How is it taking action nationally and internationally?
- Is your country ready to help its citizens in case of severe effects after pregnancy?
- Is your country aiding NGO's to solve the crisis?
- Is your country willing to aid and support the United kingdom's teenage pregnancy prevention framework?
- How is your country ready to tackle the 10 key factors of effective local strategies?
- Are pregnant adolescent teens in your country facing health issues?
- Has your country taken any actions against or in support of teenage pregnancies?
- What are these actions?
- Does your country have any established laws in regards to the topic?



V) Resources

- <https://www.who.int/>
- <https://www.unicef.org/>
- <https://www.girlsnotbrides.org/>
- <https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy>
- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/708932/teenage_pregnancy_prevention_framework.pdf
- https://apps.who.int/iris/bitstream/handle/10665/112320/WHO_20190915_adolescent_pregnancy_prevention_framework.pdf;jsessionid=0F23655ADBA-DDA05FD9980899EE386A3?sequence=1
- <https://www.unfpa.org/adolescent-pregnancy>
- https://plan-international.org/sexual-health/teenage-pregnancy?gclid=CjwKCAjw-4_mBRBuEiwA5xnFIJQ4P7VaYMRSna_3nLGnj0hg8pHr3SYVnC8mFOrskOy8wMJAW8XVvBoCfnoQAvD_BwE



Topic 2: Anti-Vaccination Dilemma:

I) Introduction and History:

A vaccine is a biological preparation that improves immunity to a particular disease. A vaccine usually contains an agent that biologically looks like disease-causing microorganisms, and is often made from weakened or killed forms of that microorganism, its toxins, or one of its surface proteins. The agent stimulates the body's immune system to recognize the agent as 'foreign', destroy it, and 'remember' it in immune cells, so that the immune system's white blood cells, recognize it with less difficulty, and destroy any of these microbes that it encounters later. Vaccines exist for some of the most fatal diseases, such as measles, polio, diphtheria, tetanus, pertussis, pneumonia due to Haemophilus influenza type B, Streptococcus Pneumonia, and diarrhea due to rotavirus; a rotavirus has been put in place, Hepatitis B, Hepatitis E, Influenza, Japanese Encephalitis, smallpox, rinderpest and meningococcal disease. Vaccines can protect children from illness and death. Vaccines are also used to fight against the rubella virus, a congenital anomaly. Several injectable inactivated Hepatitis A vaccines are available internationally. Vaccines can also help fight against cholera. Currently, there are three WHO pre-qualified oral cholera vaccines (OCV): Dukarol, Shancol, and Euvichol-Plus. An experimental Ebola vaccine, rVSV-ZEBOV proved highly protective against the deadly virus. For cervical cancer, three recommended vaccinations exist, two to protect against HPD 16 and 18 and one to protect against three additional oncogenetic HPV types. Two of the vaccines also protect against HPV types 6 and 11.

Immunization protects against illness, disability, and from diseases that vaccines could prevent. Global vaccination coverage remains at 85% with no important changes during the past few years. The usage of new and underused vaccines is increasing. However, if global immunization were to improve, 1.5 million deaths could be avoided. Global vaccination coverage has grown to include Hib, HPV, measles, mumps, and all the diseases mentioned above, and some key challenges are still being faced. An estimated 19.9 million children worldwide were not reached with routine immunization services.

According to the World Health Organization's Global Eradication Initiative, the inactivated polio vaccine (IVP), will be used as the main method for eradicating poliovirus in the next



decade. There have been recent trends of parents in Western countries refusing to vaccinate their children because of various reasons and perceived fears that the vaccines cause more harm than benefits to the health of the children who receive them. The premise of the anti-vax movement can also be influenced by the demonization of vaccinations by news and entertainment outlets. Various voices, social media, and television talk show hosts have proven to be influential by sweeping fear and distrust into parents' minds by parading as 'autism experts', providing incorrect information to them as they provide credence to the campaign. As a result, an increase in the opposition to vaccines in general occurred, specifically against the MMR (measles, mumps, and rubella) vaccination. This led to the maintenance of a drop in the vaccination rates in some Western countries causing recent outbreaks of diseases, previously thought 'eliminated', like measles. Other reasons for the anti-vaccination movement include personal reasons, such as religious or secular views. This drop in immunization poses as a threat to the 'herd immunity' the medical world has worked hard to achieve. As global communities are now more connected than ever, this translates to higher possibilities of transmitting disease-causing pathogens. Fear of vaccines and myths against them are not a new phenomenon. This opposition goes back to the 18th century due to religious reasons. However, the opposition against vaccines was not only presented in theological arguments; many also objected to them for political and legal reasons. In the mid-19th century, the Anti-Vaccination League was formed. The league emphasized that its mission was to protect the rights of people that were being 'invaded' by compulsory vaccination laws. Since the rise and spread of the use of vaccines, opposition to vaccines has never completely disappeared, apparent in different parts of the world due to arguments based in theology, skepticism and legal obstacles.

Negative neurological reactions to the whole-cell pertussis vaccination led to the decrease in the usage of the vaccine after these reactions were published in a report. The vaccines' uptake levels were elevated to normal ones after the publication of a national reassessment of vaccine efficacy that reaffirmed the benefits of the vaccine, as well as the financial incentives for general practitioners, who achieved the target of vaccine coverage. As a result, the incidence of diseases decreased rapidly. The anti-vaccination movement was more strongly revived in recent years by the publication of a paper in the Lancet, which suggested credence to the refuted claim of a connection between the MMR vaccine and the development of



autism in young children. Several studies published later disproved a casual association between the MMR vaccine and autism. The doctor who published the study was removed from the Medical Registry and banned from practicing medicine due to his biased, unethical, and flawed research.

The damage from the previously-mentioned publication was already done to numerous parts of the world, including Western Europe and North America. The decline in vaccination rates continued even after later studies debunked the alleged MMR-autism link. As a result, several cases of measles breakouts have occurred infecting patients and causing deaths throughout the Western World.

Access to online medical information, has intensely altered the dynamics of the healthcare industry and patient-physician interactions. Medical knowledge, once bound to textbooks and journals or held primarily by medical professionals, has now become accessible to the layman which has resulted in the shift in power from doctors, as the exclusive managers of patient's care, to the patients themselves. This has led to recent establishments of shared decision-making between patients and healthcare physicians. Although this is beneficial in some ways, the spreading of false and misleading information on the internet can also lead to negative consequences, such as parents not giving consent to having their children vaccinated. When it comes to vaccines, the false information is plentiful and easy to find, especially on most social media platforms: YouTube, Facebook, MySpace, Twitter, and Digg. On these platforms, around 43% to 60% of the first search results were anti-vaccination sites when searching for 'vaccination' and 'immunization'. Online anti-vaccination authors use different techniques to further their agendas. Such tactics include, but are not limited to, skewing science, shifting hypotheses, censoring opposition, attaching critics, claiming to be 'pro-safe vaccine' and not 'anti-vaccines', and claiming that vaccines are toxic and unnatural. Not only are these methods deceitful and dishonest, but they are also effective on parents. Although these sites argue that vaccines are inherently dangerous without any merit-based evidence, 59% of their visitors assumed all of the provided information was accurate. Around 53% of these visitors left the sites with inaccurate information. Research has also shown that viewing an anti-vaccine website for 5 to 10 minutes increased understanding of vaccination risks and lowered perception of the risk of not vaccination children, in comparison to visiting a neutral website. The study also found that anti-vaccine thoughts gained from viewing the



website remained 5 months later causing children of these parents to be vaccinated less than recommended. The part of the online access to anti-vaccination information cannot be devaluated in examining the rise and spread of the movement.

Opposition to the MMR vaccine among parents led to an ethical dilemma, analyzed using medical ethics and moral principles. Medical ethics want health professionals to abide by a code of bioethics upholding beneficence, justice, autonomy, and non-maleficence. Patients have the right to refuse vaccination, 'our children, our choice', based on autonomy, while health professionals are morally obligated to treat everyone with non-maleficence and avoid harm to society, at all costs. Individually, religion is a common reason to refuse vaccination. The MMR vaccine specifically, has been initiating debate, about the vaccine's components, among the Hindu, Protestant, Orthodox, Jewish, and Jehovah's Witness communities. It was originally derived from aborted fetal tissue cells. Hindu, Protestant, Muslim, and Jewish communities are against abortion for moral reasons based on religious teachings, so individuals from these religions may cite 'religious reasons' for filing vaccine exemptions. Further, the MMR vaccine also contains porcine gelatin, as a stabilizer, a means for ensuring effective storage. The porcine ingredients are unlike gelatin used for oral consumption and purified down to small peptides, commonly used in medicine capsules as well. As there is a wide range of practice preferences in every religion, some individuals belonging to religions, such as Judaism, Islam, and Hinduism, may oppose the injection of a porcine product into their body along with the vaccine. Moreover, other religious views, such as the ones held by the Dutch-Protestant Christian congregations, consider vaccinations 'inappropriate meddling in the work of God'. These groups believe that the predestined fate of someone ill should not be humanly changed. While exercising autonomy and refusing vaccinations is valid for personal issues, they will cause more harm than good if they cause population immunization rates to fall below the 'herd immunity threshold'. Herd immunity threshold is the proportion of a population that needs to be immune in order for an infectious disease to become stable in that community and it varies for every disease. The development of vaccine is considered one of the greatest achievements made in medicine due to the enormous benefit to an entire population. From an ethical perspective, achieving herd immunity and minimizing the amount of 'freeloaders' is in the best interest of the society as a whole. Further, studies liken the decision to object to vaccinations to military service drafts. For the conscientious objectors,



military service and vaccination hold the same costs: liberty, personal risk, and utility in terms of time. Naturally, the costs of military duty are more taxing and demand more from an individual than vaccination. In terms of herd immunity and depending on the harshness of awaiting diseases, these costs are the ones they should incur for the benefits of themselves as well as the benefit of society. At the forefront of legal complications, lies state-regulated vaccinations for all children attending school. Anti-vax supporters argue that this is an infringement upon autonomy; however, public health policy makers justify their actions using rule utilitarianism. Rule utilitarianism is the ideology that a rule for society should be established in a way that has the best outcome for the greatest percent of the population. Harm Principle is also often used to justify interfering with autonomy and individual liberties, against their will, if it is done so as to prevent harm to others. In the times that we have achieved immunity two questions remain. Can legal exemptions still be justified? And should these exemptions include religious reasons or should they include secular reasoning as well? Most scientists and medical experts suggest that exemptions should only be considered if society is within the limits for herd immunity. As for the religious versus secular debate, it is difficult to ignore secular objections, most of them are rooted in spiritual or general personal views. As herd immunity is collective, the capability to waive immunizations is difficult, but not impossible. If the exemptions are given to a small number of individuals who sincerely need them and are not simply inconvenienced by them, waiver may be ethically and legally sound.

II) Involvement of Countries and NGO's

The WHO has warned that the anti-vaccination propaganda is causing an alarming reappearance of avoidable diseases. The WHO has said that a lack of willingness to vaccinate is one of the world's biggest threats. The WHO puts an emphasis on the threat posed by the anti-vaccination movements in the Western world. According to the WHO, 2 to 3 million people a year, worldwide, are saved from dying by vaccines. Approximately 1.5 million could have been added to these statistics if vaccines were more widespread. In recent years, the number of cases rose by 30% worldwide in comparison with previous year. Particularly, the WHO warned about the increase of measles in Europe, where 23972 contracted the disease in 2017. According to the WHO data, measles increased by around 300% globally in the first three months of 2019 in comparison to the same time in 2018, with considerable rises in all



regions around the world. The WHO is working with countries and partners in order to improve immunization and global vaccination coverage. It has adopted several initiatives including the Global Vaccine Action Plan (GVAP) and World Immunization Week in May 2012. The GVAP is a roadmap to prevent millions of deaths by advocating for more equitable access to vaccines by 2020. Progress towards the GVAP is off track. In May 2017, ministers of Health from 194 countries endorsed a new resolution on strengthening immunization to achieve the goals of the GVAP. The resolution urges countries to strengthen the governance and leadership of national immunization programmes and improve monitoring and surveillance systems to ensure up-to-date data guides policy and programmatic decisions to optimize performance and impact. It also calls on countries to expand immunization services beyond infancy, mobilize domestic financing, and strengthen international cooperation to achieve GVAP goals. The last week of April each year is marked by the WHO and partners as World Immunization Week. It aims at promoting the use of vaccines in order to protect people against disease. Immunization saves millions of lives and is widely recognized as one of the world's most successful and cost-effective health interventions. The 2019 campaign with the theme Protected Together, #VaccinesWork, is, according to the WHO, an opportunity to recall how immunization helps keep people of the Western Pacific Region safe and healthy and to raise awareness of the need to continue being protected together as well. Through immunization, all 37 countries and areas of the Region are free of wild polio. Maternal and neonatal tetanus have been eliminated in all, but one country. Measles has been eliminated in 9 countries and rubella in 5. Nineteen countries have been verified as having new generations free from Hepatitis B. Overall, mortality from vaccine-preventable diseases has gone down 80% since 2000. However, these achievements are still fragile with some people and children still missing out on vaccinations, these diseases may come back as seen with Measles and Polio. The theme of the 2019 campaign aims at raising awareness about the importance of full immunization throughout life and urging greater action. The campaign emphasizes the role and responsibility of everyone- policy makers, health workers, and individuals- in closing the immunization gap to protect children and broader communities. The campaign will also celebrate Vaccine Heroes- from parents to community members, health workers, and innovators- who help insure we are all protected through the power of vaccines. Out of these efforts, the resulting health gains stand tall.

United States: In recent years, eight U.S states have experienced major measles outbreaks. If the anti-vaccination movement continues to gain support, there could be an increase in



outbreaks across the U.S, where measles was considered eradicated for approximately two decades. Therefore, there will be a higher possibility for measles to spread across borders. This is because of social media and television hosts spreading miseducation, and religious disapprovals. The judicial branch of the U.S federal government has had a role in the matter by considering the validity of the vaccinations and attempting to address the conflict between individual rights and the protections of public health.

United Kingdom: The U.K has been a site for religious oppositions against vaccinations from the 18th century. After Britain passed laws in the 19th century making vaccines mandatory for children, the Anti-Vaccination League was formed in London to fight against them. A British doctor was involved in studies about the connection between the MMR vaccine and autism, and was barred from practicing medicine due to his wrong information that had caused damage to various parts of the world leading to several deaths and infections after outbreaks in measles in the UK, France, and the US.

Many countries continue to face challenges surrounding vaccines, including the fact that around 19.9 million children worldwide did not benefit from routine immunization systems such as in the Democratic Republic of the Congo, Ethiopia, India, Indonesia, Iraq, Nigeria, Pakistan, and South Africa. Various countries were also affected by publications, social media, and news platforms providing incorrect information and misguiding the population, such as the Western World and North America, including the UK, Ireland, and the US.

Red Cross: The goal of the International Committee of the Red Cross (ICRC) 's Health Unit activities is to give people affected by conflict access to basic preventative and curative health care that meets universally recognized health standards. If conflict results in infrastructure damage, children and mothers may go unvaccinated. Two of the basic services the ICRC provides are vaccination campaigns and more diversifies support to ensure continuity of primary health care including broader immunization programs.



III) Possible Outcomes

The rise of anti-vaccination movements in some regions of the Western World poses as a direct threat to people's health and the collective herd immunity. People of all ages have fallen victim to recent measles outbreaks, one of the most noticeable 'eliminated' diseases that resurfaced because of not reaching the immunization threshold for MMR vaccines. These outbreaks, not only strain national healthcare systems, but also cause fatal casualties. Therefore, it is of the highest importance that all stakeholders in the medical world- physicians, researchers, educators, and governments- come together to restrict the impact of the anti-vaccination movement targeting parents. Research has shown that even parents in favor of vaccinations can be confused by the continuous debate causing them to question their own choices. Many parents are unaware of how vaccines work and lack access to accurate information explaining the significance of the process. Furthermore, those with the greatest need for access to knowledge about vaccinations seem the most vulnerable to inaccurate information. Further, the effective combat of the wrongful demonization of vaccination through social media and news platforms is a must in order to re-educate parents and populations. A qualitative study, investigating how parents respond to contradictory messages about vaccine safety, reached the conclusion that personal experiences, value systems, and the level of trust in health professionals and relative authorities are all essential to parental decisions about immunization and vaccinations. Therefore, to fight against the anti-vaccination movement, there must be a very strong emphasis on helping parents develop and form this trust in health professionals and related authorities, educating parents about the facts and figures concerning the benefits of vaccines, debunking and refuting the myths peddled and forwarded by the anti-vaccination movements, and even introducing legislations that promote and do not demonize vaccinations, if not mandating them. However, countries should also be wary about the reactions to their decisions and what is actually in the best interest of the society as a whole and not jeopardize the safety and well-being of its residents.



IV) Questions to Consider

- Has your country taken any action regarding the Global Vaccine Action Plan?
- What national and international actions has your country taken?
- Is/Has your country collaborated with any NGO's or country allies in order to combat the issue?
- How is the anti-vaccination movement being spread in your country?
- What are the vaccination rates in your country?
- Have any 'eliminated' diseases resurfaced in your country?
- What have your allies/other countries done?
- What are some resolutions your country has signed?
- How does your country view the problem?
- What laws/legislations has your country passed in order to combat the movement?
- How effective are the implemented laws?
- What are the economic, religious, social... statuses of your country?
- How do these statuses affect your country's ability to solve the problem locally or globally?
- What are the mortality statistics of your country because of the anti-vaccination movement?
- How has the anti-vaccination movement affected your country?



V) Resources

- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6122668/>
- <https://www.dw.com/en/who-anti-vaccination-campaigns-threaten-global-health/a-47167570>
- <https://www.cfr.org/article/measles-and-threat-anti-vaccination-movement>
- <https://www.historyofvaccines.org/index.php/content/articles/government-regulation>
- <https://www.icrc.org/en/doc/what-we-do/health/health-overview.htm>
- <https://www.who.int/>