



## PROPOSAL FOR COMMUNICABLE DISEASE PREVENTION AND CONTROL WITH SPECIAL REFERENCE TO COVID-19 PANDEMIC

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### KEYWORDS :

#### BACKGROUND:

Throughout history, communicable diseases have impacted humanity; however, these diseases became more threatening as society made the shift to agrarian life around 10,000 years ago. The creation of more closely connected communities gave infectious diseases the chance to grow into epidemics. Diseases like influenza, smallpox, leprosy, malaria, and tuberculosis were among those that have thrived since this shift. As human civilization has evolved and communities have become better connected, the likelihood of pandemics has subsequently risen. Below, we discuss the history of infectious diseases and how they will continue to affect our modern-day lives.

The first recorded pandemic occurred during the Peloponnesian War in Athens, Greece in 430 B.C. The disease was carried across the Athenian walls during the siege. Historians estimate around two thirds of the population died from contracting the disease. Following this, the Antonine Plague emerged in 163 A.D. and is now considered to be an early version of smallpox. This plague began with the Huns infecting the Germans, who then passed it to the Romans. Historians believe that the Cyprian plague began in Ethiopia in 250 A.D. The next three centuries was witness to multiple, recurring outbreaks of the Cyprian plague. As the world moved into the 20<sup>th</sup> century, influenza pandemics became more frequent. Between 1889 and 1890, 360,000 died from the Russian Flu. 50 million deaths that resulted from the Spanish Flu pandemic that began in 1918. The 1918 pandemic was shortly followed by the Asian Flu pandemic that saw two waves in the 1950s. The final pandemic of the 20th century was the human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) pandemic, which was first identified in 1981. The spread of HIV/AIDS is still considered to be a pandemic, as more than 32 million lives have been lost to this disease over the past four decades. The deadly threat of coronaviruses the most recent pandemics have been the 2003 severe acute respiratory syndrome (SARS) pandemic and the current COVID19 pandemic, both of which have been caused by coronaviruses. The SARS pandemic claimed the lives of 774 people before it was effectively controlled via quarantine efforts. The SARS pandemic was viewed as a wake-up call by global health agencies, who believed it highlighted the world's unreadiness to deal with and prevent the spread of infectious diseases from developing into a pandemic. Lessons learned in the SARS pandemic were used to control the H1N1, Ebola, and Zika outbreaks.

Despite this, the world remains unprepared for COVID-19, as it was ultimately declared a global pandemic by the World Health Organization on March 11, 2020. As of June 23, 2022, more than 6.3 million deaths have been attributed to COVID-19, with 539,893,858 confirmed cases. Other than the loss of life and number of cases, COVID-19 significantly changed the world, as it paused economies and prevented social interaction, both of which inevitably impacted mental health, food security, and much more for the global population. To reduce that problem an integrated approach is required, combining health promotion, disease prevention and patient treatment. The

prerequisite for success in this fight is the participation of all health care professionals. Nurses and midwives, as major frontline providers of care, are in a position to contribute significantly to reducing the burden.

#### CONTEXT

A communicable disease is any disease that passes between people or animals. People sometimes refer to communicable diseases as "infectious" or "transmissible" diseases. Communicable diseases can transmit through contact with bodily fluids, insect bites, contaminated surfaces, water, and foods, or through the air. Communicable diseases caused by bacteria, viruses, protozoa, fungi and parasites, make a huge contribution to the burden of disease, disability and death in low- and middle-income countries. Some communicable diseases are easily preventable through simple measures such as vaccination and changes in human behaviour (for example, hand washing with soap). However, the transmission of infectious agents will be difficult to reduce to the levels seen in wealthier nations without significant reductions in the proportion of people living in impoverished social circumstances, with poor nutrition that leaves them more vulnerable to infection, without housing that is secure from disease-carrying pests, and without access to clean drinking water, improved sanitation or the safe disposal of household waste. Strenuous efforts are being made to address these problems in Ethiopia, as elsewhere in Africa and in other developing countries. To prevent or control the major communicable diseases in Ethiopia, a concerted effort by the nation's health workers, the government, development partners and community members is crucial. Together with the practical skills training associated with this Module, Communicable Diseases will help you to acquire the basic skills and knowledge to reduce the burden of mortality and morbidity in your community through the detection, prevention and treatment of common infections. There's also a rare group of infectious diseases known as transmissible spongiform encephalopathies (TSEs). Infectious diseases are extremely common worldwide, but some are more common than others. For instance, each year in the United States, 1 out of every 5 people is infected with the influenza virus, but less than 300 people are diagnosed with prion diseases.

#### STRATEGIES FOR CONTROL OF COMMUNICABLE DISEASES:

Reporting cases of communicable disease is important in the planning and evaluation of disease prevention and control programs and in the detection of common-source outbreaks. It is likely that everyone will be affected with a communicable disease at some point in their lives. Vaccines can prevent many infectious diseases. There are vaccines for children and adults designed to provide protection against many communicable diseases. There are also vaccines that are recommended or required for travel to certain parts of the world. To prevent the spread of infectious disease following is essential strategy, 1. Immunise against infectious diseases, 2. Wash and dry your hands regularly and well, 3. Stay at home if you are sick, 4. Cover coughs and sneezes, 5. Clean surfaces regularly, 6. Ventilate your home, 7. Prepare

food safety, 8. Practise safe sex. In public health point of view strategies are various levels are essential for better prevention and control of Communicable diseases,

#### **i. At Community Level:**

Public health and social measures (PHSMs) are being implemented across the world to suppress SARS-CoV-2 transmission and reduce mortality and morbidity from COVID-19. PHSMs include personal protective measures (e.g. physical distancing, avoiding crowded settings, hand hygiene, respiratory etiquette, mask-wearing); environmental measures (e.g. cleaning, disinfection, ventilation); surveillance and response measures (e.g. testing, genetic sequencing, contact tracing, isolation, and quarantine); physical distancing measures (e.g. regulating the number and flow of people attending gatherings, maintaining distance in public or workplaces, domestic movement restrictions); and international travel-related measures. IPC at facilities like Market, Schools, Business & religious places etc.

#### **ii. At National. Level :**

Encourage countries to develop and implement policies to maintain and strengthen IPC programmes and measures in health care facilities in the context of the current ongoing transmission of the SARS-CoV-2, with recognition that epidemiological trends may vary and the risk of transmission of other pathogens. These policies should achieve the following:

1. Early detection at points of entry (PoE) & Post Screening procedure
2. Maintain IPC achievements and prioritize critical gaps in IPC programmes.
3. Maintain IPC operational readiness for a resurgence of COVID-19 case and other emerging and re-emerging pathogens.
4. Scale up IPC capacity with strong investments in the implementation of IPC minimum requirements and the ultimate goal of achieving the implementation of all IPC core components and ensuring resilience and sustainability.
5. Strengthening of surveillance system for communicable diseases.

#### **iii. At International. Level:**

The principle strategies include: 1) implementation of mechanisms for international epidemiologic surveillance; 2) use of international law to support the control of communicable diseases; 3) international cooperation on health matters; 4) strategies to strengthen primary care services and health systems in general; 5) promotion of the transfer of resources for research and development from the North to the South. All countries should adhere to international regulations, including the International Health Regulation and those of the World Trade Organization. Developed countries should provide financial and technical support for countries undergoing emergencies linked to communicable diseases.

To conclude with, this article proposes prevention and control strategies for communicable disease encompassing all the aspects.