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Tuberculosis Report

Introduction

Tuberculosis, often called TB, is a serious infectious disease that mainly affects the lungs. It is caused by bacteria that spread through the air when a person with TB coughs, sneezes, laughs, or talks. This means people nearby can breathe in the bacteria and become infected. TB mostly harms the lungs, but it can also affect other parts of the body like the brain, spine, and kidneys if it is not treated.

Common signs of TB include a cough that lasts more than three weeks, chest pain, coughing up blood, feeling very tired, losing weight without trying, night sweats, and a fever. Some people do not notice symptoms at first, which can make it harder to catch early.

People with TB need support from health and social care services. This includes doctors, nurses, medication support, and community services that help people complete their treatment and stay safe. Support can also include help with housing, access to food, and regular check-ups to make sure the person is recovering properly and not spreading the disease to others. Early support also helps build trust between patients and healthcare workers.

Main Body

How Tuberculosis is Measured and Monitored

Tuberculosis is measured and monitored in different ways to understand how common it is and how well it is being controlled.

One main way is through **testing and diagnosis**. Doctors use tests like chest X-rays and sputum tests. A sputum test checks mucus from the lungs to see if TB bacteria are present. Blood tests and skin tests can also be used to check if someone has been exposed to TB before. These tests help doctors find out if someone has active TB or a hidden form of the disease.

Another method is **recording cases**. When someone is diagnosed with TB, it is reported to health services. In the UK, the UK Health Security Agency collects this data. Recent data shows that there are around **4,500 to 5,000 TB cases each year in the UK**. This helps experts see if cases are going up or down and which groups are most affected. It also helps local services plan where more support and testing may be needed.

Contact tracing is also very important. When someone has TB, health workers try to find people they have been close to, such as family or friends. These people are then tested. This helps stop the disease from spreading further and protects the wider community.

There is also **global monitoring**. The World Health Organization (WHO) reports that in **2022 around 10.6 million people worldwide became ill with TB**. This shows that TB is still a major global health problem and needs ongoing attention from governments and health organisations.

Another way TB is monitored is by checking **treatment progress**. Patients take medicine for at least six months, and doctors track how well they are doing. If someone stops taking their medicine, the disease can come back and become harder to treat. Regular check-ups also allow doctors to see if the patient is improving or if changes to treatment are needed.

Health services also monitor **drug-resistant TB**. This is when the bacteria no longer respond to normal medicine. The WHO reports that hundreds of thousands of people each year develop drug-resistant TB, which is more difficult to treat and often takes longer to cure. Monitoring this closely helps prevent it from spreading further. Data is also compared year by year to see if control methods are working.

How Tuberculosis is Controlled

There are several ways TB is controlled to protect people and reduce the spread.

One key method is **early diagnosis**. Finding TB early means treatment can start quickly, which helps stop the disease from spreading to others and improves recovery.

The main treatment is **antibiotic medication**. Patients must take a combination of drugs every day for at least six months. It is very important to finish the full course. If treatment is stopped early, the bacteria can become stronger and harder to treat. This can lead to more serious illness and longer recovery times.

Another method is **vaccination**. The BCG vaccine is used in the UK for people who are at higher risk. It is often given to babies in some areas. While it does not fully stop TB, it helps protect against serious forms of the disease and reduces the risk of complications.

Infection control is also important. People with active TB may need to stay at home or avoid close contact with others until they are no longer infectious. In hospitals, staff may use masks and good ventilation to reduce the spread. Simple actions like covering the mouth when coughing can also help.

Education and awareness also help control TB. People are taught about symptoms and how the disease spreads. This helps them get medical help early and reduces fear and misunderstanding in the community. Schools and local groups can also help spread this information.

Support from **health and social care services** is very important. Some people find it hard to take medication for a long time. Nurses and support workers help patients stay on track. This can include reminders, home visits, and emotional support.

In some cases, **directly observed therapy (DOT)** is used. This means a healthcare worker watches the patient take their medicine. This helps make sure the treatment is completed properly and reduces the risk of the disease returning.

Improving **living conditions** also helps control TB. The disease spreads more easily in crowded places with poor air flow. Better housing, less overcrowding, and cleaner environments can reduce the spread and protect vulnerable groups. Access to clean air and space is very important.

Consequences of Tuberculosis on People in the Community

Tuberculosis has many effects on individuals and the community.

First, there are **physical health effects**. TB can make people very ill and damage the lungs. According to the WHO, **around 1.3 million people died from TB in 2022**, showing how serious the disease can be. Even after treatment, some people may have long-term breathing problems or feel weak for a long time.

There are also **mental and emotional effects**. Being diagnosed with TB can be stressful. People may feel worried, scared, or lonely, especially if they have to stay away from others during treatment. Long treatment times can also affect a person's mood and motivation.

TB can cause **financial problems**. People may not be able to work while they are ill. This can lead to loss of income and difficulty paying for basic needs. Some may also need support from social services during this time.

Another issue is **stigma**. Some people may feel embarrassed about having TB, and others may avoid them because they are afraid of catching it. This can make people feel isolated and less likely to seek help, which can make the disease worse.

TB also affects **healthcare services**. Treating TB takes time and resources. If many people are infected, it can put pressure on hospitals and clinics and increase waiting times for other patients.

Families are also affected. Family members may worry about catching the disease or may need to care for the person who is ill. This can cause stress and affect relationships at home.

In the wider community, TB can affect **public health**. It spreads more easily in crowded places and among vulnerable groups, such as people with weak immune systems or those living in poor housing conditions. This means it can become a bigger problem if not controlled properly.

TB can also affect **education and daily life**. Young people with TB may miss school, which can affect their learning and future opportunities. Adults may struggle to carry out normal activities because they feel tired or unwell, which can reduce their quality of life. Over time, this can lower confidence and independence.

Conclusion

Tuberculosis is still a serious health problem around the world. According to the World Health Organization, around **10.6 million people became ill with TB in 2022**, and about **1.3 million people died from it**. These numbers show that TB is still one of the most serious infectious diseases worldwide and continues to affect millions of people every year.

In the UK, TB rates are lower, but the disease has not been completely removed. Around **4,500 to 5,000 cases are reported each year**, which shows it is still a concern. Some groups, such as people living in crowded conditions or those with weaker immune systems, are more at risk. Efforts are still needed to reduce these numbers further.

Overall, TB has a big impact on people's health, mental wellbeing, and daily lives. It also affects families and puts pressure on healthcare services. Continued efforts in testing, treatment, education, and support are important to reduce the spread and protect communities in the future. Long-term planning and support will help lower cases even more.