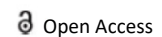




OPINION ARTICLE



The Role of Public Health in Preventive Medicine

Hannah C Lewis*

Department of Infectious Diseases, The University of Melbourne, Melbourne, Australia

Description

Preventive medicine is a branch of medicine that focuses on preventing illnesses and injuries from occurring or reducing their impact. It involves various measures that can be taken to maintain good health and prevent the occurrence of diseases. The ultimate goal of preventive medicine is to promote health and well-being in individuals and communities.

Importance of preventive medicine

Preventive medicine is important because it can help us avoid many illnesses and injuries. By taking preventive measures, we can reduce our risk of developing chronic diseases such as heart disease, diabetes, and cancer. We can also prevent injuries from occurring by taking precautions and following safety guidelines. Preventive medicine can also help us maintain our mental health and well-being by promoting healthy lifestyle habits [1].

Types of preventive medicine

There are three types of preventive medicine: primary, secondary, and tertiary. Each type of preventive medicine targets a different stage of disease prevention [2].

Primary prevention: Primary prevention involves measures that are taken to prevent the onset of disease. These measures include healthy lifestyle habits such as regular exercise, a balanced diet, and avoiding smoking and excessive alcohol consumption. Vaccinations are also an important aspect of primary prevention, as they can prevent the spread of infectious diseases.

Secondary prevention: Secondary prevention involves early detection and treatment of disease. This can be achieved through regular health screenings such as mammograms, colonoscopies, and blood pressure checks. Early detection and treatment can prevent the progression of disease and improve outcomes [3].

Tertiary prevention: Tertiary prevention involves measures that are taken to prevent further complications of disease. This includes rehabilitation and disease manage-

ARTICLE HISTORY

Received: 01-Mar-2023, Manuscript No. AJPMPH-23-95600;
Editor assigned: 06-Mar-2023, Pre QC No. AJPMPH-23-95600 (PQ);
Reviewed: 23-Mar-2023, QC No. AJPMPH-23-95600;
Revised: 30-Mar-2023, Manuscript No. AJPMPH-23-95600 (R);
Published: 06-Apr-2023

ment programs that help individuals manage chronic conditions and prevent complications such as heart attacks, strokes, and kidney failure [4].

Preventive measures for chronic diseases

Chronic diseases such as heart disease, diabetes, and cancer are major health concerns in many parts of the world. Preventive measures can be taken to reduce the risk of developing these diseases.

Diet and exercise: A healthy diet and regular exercise can help reduce the risk of developing chronic diseases. A diet that is rich in fruits, vegetables, whole grains, and lean protein can help maintain a healthy weight and reduce the risk of heart disease and diabetes. Regular exercise can also help maintain a healthy weight and reduce the risk of chronic diseases.

Screening tests: Regular health screenings can help detect chronic diseases early when they are more treatable. Screenings such as blood pressure checks, cholesterol tests, and mammograms can help detect early signs of disease and improve outcomes.

Vaccinations: Vaccinations can help prevent the spread of infectious diseases such as influenza, hepatitis B, and Human Papillomavirus (HPV). Vaccinations are an important aspect of primary prevention.

Preventive measures for injuries

Injuries can be prevented by taking precautions and following safety guidelines [5].

Seat belts: Wearing a seat belt can reduce the risk of injury in a car accident. Seat belts are designed to keep individuals in their seats during a collision and prevent them from being thrown from the vehicle.

Helmets: Helmets can help prevent head injuries in activities such as cycling, skiing, and snowboarding. Wearing a helmet can reduce the risk of head injury by absorbing the impact of a collision.

Fall prevention: Falls are a common cause of injury, especially in older adults. Fall prevention measures include

removing tripping hazards, installing grab bars in the bathroom, and wearing appropriate footwear.

Preventive measures for mental health

Preventive measures can be taken to maintain good mental health and well-being.

Stress management: Stress can have a negative impact on mental health. Stress management techniques such as meditation, yoga, and deep breathing exercises can help reduce stress and promote relaxation.

Social support: Maintaining social connections can help improve mental health and well-being. Having a support system of friends and family can help individuals cope with stress and difficult situations.

Healthy lifestyle: A healthy lifestyle that includes regular exercise, a balanced diet, and adequate sleep can also promote good mental health. Exercise can help reduce symptoms of depression and anxiety, while a healthy diet can provide essential nutrients that support brain function.

Preventive measures for infectious diseases

Infectious diseases can be prevented through various measures, including vaccination and good hygiene practices.

Vaccinations: Vaccinations are an important aspect of primary prevention for infectious diseases such as influenza, hepatitis B, and Human Papillomavirus (HPV). Vaccinations can help prevent the spread of these diseases and protect individuals from infection.

Hand washing: Good hand hygiene is essential for preventing the spread of infectious diseases. Washing hands regularly with soap and water, or using hand sanitizer, can help reduce the spread of germs.

Safe food handling: Foodborne illnesses can be prevented through safe food handling practices, such as washing hands before handling food, cooking food to the appropriate temperature, and storing food at the correct tempera-

ture.

Preventive medicine plays a critical role in maintaining good health and preventing illnesses and injuries. By taking preventive measures, individuals can reduce their risk of developing chronic diseases, prevent injuries, maintain good mental health, and prevent the spread of infectious diseases. Primary, secondary, and tertiary prevention measures can be taken at different stages of disease prevention to achieve optimal health outcomes.

References

- [1] Shpilsky GF, Takahashi H, Aristarkhova A, Weil M, Ng N, Nelson KJ, et al. Bacillus Calmette-Guerin's beneficial impact on glucose metabolism: Evidence for broad based applications. *IScience* 2021;24:103150.
- [2] Takahashi H, Kühtreiber WM, Keefe RC, Lee AH, Aristarkhova A, Dias HF, et al. BCG vaccinations drive epigenetic changes to the human T cell receptor: Restored expression in type 1 diabetes. *Sci Adv* 2022;8: eabq7240.
- [3] Ten Doesschate T, van der Vaart TW, Debisarun PA, Taks E, Moorlag SJCFM, Paternotte N, et al. Bacillus Calmette-Guerin vaccine to reduce healthcare worker absenteeism in COVID-19 pandemic: A randomized controlled trial. *Clin Microbiol Infect* 2022;28:1278-1285.
- [4] Upton CM, Wijk RCV, Mockeliunas R, Simonsson USH, McHarry K, Hoogen GVD, et al. Safety and efficacy of BCG re-vaccination in relation to COVID-19 morbidity in healthcare workers: A double-blind, randomised, controlled, phase 3 trial. *EClinicalMedicine* 2022;48:101414.
- [5] Lauring, AS, Tenforde MW, Chappell JD, Gaglani M, Ginde AA, McNeal T, et al. Clinical severity of, and effectiveness of mRNA vaccines against, covid-19 from omicron, delta, and alpha SARS-CoV-2 variants in the United States: Prospective observational study. *BMJ* 2022;376:e069761.