

Health and Social Care Knowledge Organiser: Component 3 – Physical Factors affecting health and well-being.

Health: The state of physical, mental, and social well-being, where an individual's body and mind are free from illness, injury, or disease. It encompasses various aspects such as maintaining a balanced lifestyle, engaging in regular physical activity, adopting healthy eating habits, managing stress effectively, and having a positive outlook on life. Good health allows individuals to function optimally and pursue their daily activities with energy and vitality.

Inherited Conditions

Cystic fibrosis: A genetic disorder that affects the lungs, digestive system, and other organs.

Respiratory:

- Thick mucus in the airways can lead to frequent lung infections, difficulty breathing, and reduced lung function.
- Chronic coughing, wheezing, and shortness of breath are common symptoms.
- Increased susceptibility to respiratory complications such as bronchitis and pneumonia.

Digestive Problems:

- Thick mucus affects the pancreas, reducing its ability to produce enzymes needed for proper digestion.
 - Malabsorption of nutrients can result in poor weight gain, malnutrition, and vitamin deficiencies.
- Pancreatic insufficiency can lead to greasy stools, abdominal pain, and difficulty absorbing fats.

Other Systemic Effects:

- CF can impact other organs, including the liver, sinuses, and reproductive system.
- Liver disease, sinusitis, nasal polyps, and infertility are potential complications.
- Salt imbalances may occur due to abnormal sweat gland function, leading to electrolyte disturbances.
- Joints and bone problems

Impact on Daily Life:

- Frequent medical treatments, including airway clearance techniques and medication regimens, are necessary.
- Regular visits to healthcare providers and hospitalizations may be required.
- CF can affect overall energy levels, limiting physical activities and endurance.
- Time missed from school due to illness and treatment.

Emotional and Social Aspects:

- Living with a chronic condition can result in emotional stress, anxiety, and depression.
- CF may require lifestyle adjustments and adherence to strict treatment routines.
- Support from family, friends, and healthcare professionals plays a vital role in coping with CF.

Haemophilia: A blood clotting disorder caused by a deficiency in certain clotting factors, leading to prolonged and excessive bleeding, even minor injuries or surgeries can result in prolonged bleeding episodes. Spontaneous bleeding into joints and muscles is common, causing pain, swelling, and limited mobility.

Complications and Health Risks:

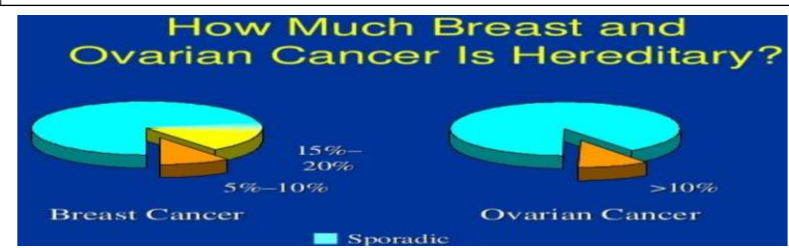
- Frequent bleeding episodes can lead to joint damage and chronic pain.
- Internal bleeding in vital organs, such as the brain, can be life-threatening.
- Haemophilia patients may require transfusions of clotting factor concentrates to manage bleeding episodes.

Lifestyle Considerations:

- Individuals with haemophilia may need to be cautious during physical activities and sports to prevent injuries and bleeding.
- Regular medical appointments, including visits to specialized haemophilia treatment centres, are necessary.
- Treatment options, such as prophylactic factor replacement therapy, may be prescribed to prevent or reduce bleeding episodes.

Emotional and Social Aspects:

- Living with a chronic condition like haemophilia can impact emotional well-being and social interactions.
- Haemophilia management may require adherence to treatment routines and lifestyle modifications.
- Support from healthcare providers, haemophilia treatment centres, and a supportive community can be valuable.



Cardiovascular Disease (CVD)

CVD can lead to various complications, such as heart attacks, strokes, or heart failure, which can significantly impact an individual's physical health. Reduced cardiac function may result in symptoms like chest pain (angina), shortness of breath, fatigue, or irregular heartbeat. CVD can lead to limitations in physical activities and overall functional capacity.

Emotional and Psychological Impact: Living with CVD can cause emotional distress, including feelings of anxiety, depression, or fear of future cardiac events. Coping with the physical symptoms and potential lifestyle changes can impact an individual's mood, self-esteem, and overall emotional well-being. The fear of recurrence or the need for ongoing medical interventions can contribute to stress and psychological strain.

Managing CVD often requires lifestyle changes, including dietary modifications, regular exercise, smoking cessation, and medication adherence. These changes may be challenging and may impact an individual's quality of life, social interactions, and enjoyment of certain activities. Adapting to a new routine and following treatment plans can require significant effort and adjustment.

CVD can affect social interactions and relationships, as individuals may need to prioritise their health needs or limit participation in certain activities. - Changes in energy levels, physical limitations, or lifestyle modifications can influence social dynamics and participation in social events.

Predisposition

Diabetes: Certain genetic and lifestyle factors can increase the predisposition to develop type 2 diabetes.

Hypertension (High Blood Pressure): Genetic and environmental factors can contribute to an individual's predisposition to hypertension.

Cardiovascular Disease: Family history, genetics, and lifestyle factors can increase the predisposition to conditions such as heart disease and stroke.

Obesity: Genetic factors can contribute to an individual's predisposition to obesity, though lifestyle choices also play a significant role.

Asthma: Genetic susceptibility, along with environmental factors like exposure to allergens and irritants, can increase the predisposition to asthma.

Certain Cancers: Genetic mutations can increase the predisposition to certain types of cancer, such as breast, ovarian, or colorectal cancer.

- Alzheimer's Disease: Genetic factors, including certain gene variants like the ApoE4 allele, can increase the predisposition to Alzheimer's disease.

Osteoporosis: Genetic factors, along with lifestyle choices, can affect an individual's predisposition to developing osteoporosis.

Autoimmune Disorders: Many autoimmune disorders, such as rheumatoid arthritis or lupus, have a genetic component that contributes to predisposition.

Allergies: Exposure to certain allergens in the environment, such as pollen, dust mites, or pet dander, can increase an individual's predisposition to develop allergies.

Asthma: Environmental factors like exposure to tobacco smoke, air pollution, or occupational irritants can contribute to an individual's predisposition to asthma.

Skin Conditions: Environmental factors like prolonged sun exposure, certain chemicals, or irritants can increase the predisposition to conditions like eczema or contact dermatitis.

Respiratory Conditions: Exposure to environmental pollutants, such as particulate matter, smoke, or chemicals, can contribute to a predisposition to respiratory conditions like chronic bronchitis or chronic obstructive pulmonary disease (COPD).

Lung Cancer: Exposure to environmental carcinogens, such as tobacco smoke, asbestos, radon, or air pollutants, can increase the predisposition to developing lung cancer.

Occupational Hazards: Certain occupations or industries may have environmental factors that increase the predisposition to specific conditions, such as occupational lung diseases or certain cancers (e.g., asbestos-related mesothelioma).

Environmental Sensitivities: Some individuals may have a predisposition to environmental sensitivities, where exposure to certain substances, such as fragrances, chemicals, or mould, can trigger allergic or respiratory symptoms.