



Levels of Prevention

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Introduction

- **Nurses have 4 Fundamental responsibilities followed below ,**
 - ✓ **Promotion of Health**
 - ✓ **Prevention of illness**
 - ✓ **Restoration of Health**
 - ✓ **Alleviation of Suffering**

- **Two phases of Disease are**
 - ✓ **(i) Pre Pathogenesis &**
 - ✓ **(ii) Pathogenesis**

Definition of Disease Prevention



- **“Activities designed to protect patients or other members of the public from actual or potential health threats and their harmful consequences.”**
- **OR**
- **“Prevention is the action aimed at eradicating, eliminating or minimizing the impact of disease and disability.”**



Levels of Prevention

- **1) Primordial Prevention**
- **2) Primary Prevention**
- **3) Secondary Prevention**
- **4) Tertiary Prevention**



Level of Prevention

Prevent the development of risk factors

Primordial Prevention



No disease

Onset of disease



Asymptomatic disease

Clinical diagnosis



Clinical course



Primary Prevention

Manage the risk factors. Prevent the onset of disease



Secondary Prevention

Early diagnosis & prompt treatment.



Tertiary Prevention

Reduce complication & disability



1) Primordial Prevention

- **“This is a prevention of Development of risk Factors in a Population group , which they have not yet appeared.”**
- **Special Attention is Given in preventing Chronic Disease.**
- **Main Intervention is Health Education.**
- **In this efforts are dedicated towards Discouraging people from adopting Harmful Life styles/Habits through Individual & Mass Education.**

Cont...



- **Primordial prevention, a relatively new concept, is receiving special attention in the prevention of chronic diseases. Ex., many adult health problems (e.g. obesity, hypertension) have their early origins in childhood, because this is the time when lifestyles are formed(Ex., smoking, eating patterns, physical exercise).**
- **Primordial prevention begins in childhood when health risk behavior begins. Parents, teachers and peer groups are important in imparting health education to children.**

Examples of Primordial prevention



- National programs and policies on:
 - Food and nutrition
 - Comprehensive Policies for discourage smoking , Alcohol & Drugs
 - To promote regular physical activity
 - Making major changes in lifestyle



2) Primary Prevention

- **“Primary prevention can be defined as the action taken prior to the onset of disease, which removes the possibility that the disease will ever occur.”**
- **In this Action are taken before the onset of Disease.**
- **It signifies intervention in the pre-pathogenesis phase of a disease or health problem.**



Cont...

- **It includes the concept of "positive health", a concept that encourages achievement and maintenance of "an acceptable level of health that will enable every individual to lead a socially and economically productive life".**



Primary Prevention

Achieved by

Achieved by

Health promotion

- Health education
- Environmental modifications
- Nutritional interventions
- Life style and behavioral changes

Specific protection

- Immunization and seroprophylaxis
- chemoprophylaxis
- Use of specific nutrients or supplementations
- Safety of drugs and foods
- Control of environmental hazards, e.g. air pollution

Approaches for Primary Prevention:



- **The WHO has recommended the following approaches for the primary prevention of chronic diseases where the risk factors are established:**
 - **A) Population (mass) strategy**
 - **B) High -risk strategy**

A) Population (mass) strategy



- **“Population strategy” is directed at the whole population irrespective of individual risk levels.**
- **For example, studies have shown that even a small reduction in the average blood pressure or serum cholesterol of a population would produce a large reduction in the incidence of cardiovascular disease**
- **The population approach is directed towards socio-economic, behavioral and lifestyle changes**



B) High -risk strategy:

- **The high -risk strategy aims to bring preventive care to individuals at special risk.**
- **This requires detection of individuals at high risk by the optimum use of clinical methods.**
- **Primary prevention is a “Holistic” approach which relies on the measures taken to Promote Health.**



Modes of Intervention

- **(i). Health Promotion**
- **(ii). Specific Protection**



(i).Health Promotion

- **“It is the process of enabling people to increase control over the determinants of health and thereby improve their health”.**

OR

- **“ Health Promotion is directed towards Strengthening the Host.”**

OR

- **Process of enabling people to increase control over and to improve health**

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Cont...

- **Main Aims of Health promotion is To enable people to increase control over Health & To Improve the Over all Health.**
- **There Aim can be achieved by the following Intervention :**
 - **Health Education**
 - **Environmental Modification**
 - **Behavioral Changes**
 - **Life Style change**
 - **Nutritional Intervention**

Cont...



- **Health education to improve healthy habits and health consciousness in the community.**
-
- **Improvement in nutritional standards of the community.**
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- **Healthful physical environment (Housing, water supply, excreta disposal etc.,)**
- **Good working condition**
- **Periodic Selective examination of risk**
 - **population.**



(i). Specific Protection

- **“ Efforts directed toward protection against specific diseases.”**
- **OR**
- **“ The provision of Conditions for normal Mental & Physical Functioning of the Human beings & in Group.it includes the Promotion of Health , Prevention of Sickness , & Care of Individuals .”**



Intervention

- **Immunization**
- **Use of specific nutrients**
- **Chemoprophylaxis**
- **Protection against occupational hazards**
- **Protection against accidents**
- **Control of General Environment**
- **Avoidance of allergens etc.**

Cont...



- **Use of Specific immunization (BCG, DPT,MMR vaccines)**
- **Chemoprophylaxis (tetracycline for Cholera, dapsons for Leprosy, Chloroquine for malaria,etc.,)**
- **Use of specific nutrients (vitamin A for Children, iron folic acid tablets for Pregnant mothers)**
- **Protection against accidents (Use of helmet, seatbelt,etc.,)**
- **Protection against occupational hazards.**
- **Avoidance of allergens.**
- **Protection from air pollution**



3.Secondary Prevention

- It is defined as “ An Action which halts the progress of a disease at its incipient stage and prevents complications.”
- The specific interventions are:
 - (i) early diagnosis (e.g. screening tests, breast self examination, pap smear test, radiographic examinations etc.)& Treatment
 - (ii) Referral

Cont...



- **Secondary prevention attempts to arrest the disease process, restore health by seeking out unrecognized disease and treating it before irreversible pathological changes take place, and reverse communicability of infectious diseases.**
- **It protects others in the community from acquiring the infection and thus provide at once secondary prevention for the infected ones and primary prevention for their potential contacts.**



Objectives of Secondary Prevention

- ❖ Complete cure and prevent the progression of disease process.
- ❖ To prevent the spreads of disease by curing all the known cases.
- ❖ To prevent the complications and sequel of disease.
- ❖ To shorten the period of disability.



(i) Early Diagnosis



- **The Disease complications can be prevented & Health can be Restored by Diagnosing the Disease at it's Early stages & by providing the adequate Treatment according to the Health problem. Includes :**
 - ✓ **Arrests/Stops the Disease Process**
 - ✓ **Restore the Health**
 - ✓ **Treat the Disease before Irreversible pathological changes occur.**
 - ✓ **Reverse the Communicability of infectious Disease.**



**Early
Diagnosed**

**Better
Prognosis**



Cont...



- **Screening Surveys (urine Examination for Diabetes)**
- **Mass Treatment Approach includes :**
 - **Juvenile Mass Treatment**
 - **Selective Mass Treatment**
 - **Total Mass Treatment**
- **The type of Approach used depends upon Nature of Disease & Incidence of Disease.**



Key To Remember

Primary = Prevention

Secondary = Screening

Tertiary = Treatment

4. Tertiary Prevention



- It is used when the disease process has advanced beyond its early stages.
- It is defined as “all the measures available to reduce or limit impairments and disabilities, and to promote the patients’ adjustment to irremediable conditions.”
- Intervention that should be accomplished in the stage of tertiary prevention are disability limitation, and rehabilitation.
- Intervention in Late Pathogenesis Phase.



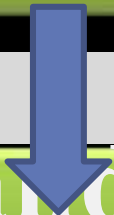
Disease



Impairment



Disability



Handicap

(i) Disability Limitation

- To prevent or halt the transition of disease process from Impairment & Handicap.
- **Impairment**: any loss or abnormality of psychological, physiological or anatomic structure or function.
- **Disability**: any restriction or lack of ability to perform an activity in the manner considered normal for a human being.
- **Handicap**: disadvantage for a given individual, resulting from impairment or disability, that limits or prevents the fulfillment of a role that is normal for that individual





ACCIDENT



Impairment: Loss of an anatomical structure



Disability: Lack of ability to perform an activity



Handicap: Prevents fulfillment of normal role



Disease - dental caries



Impairment – loss of tooth



Disability – cant talk

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Handicap – cant socialize

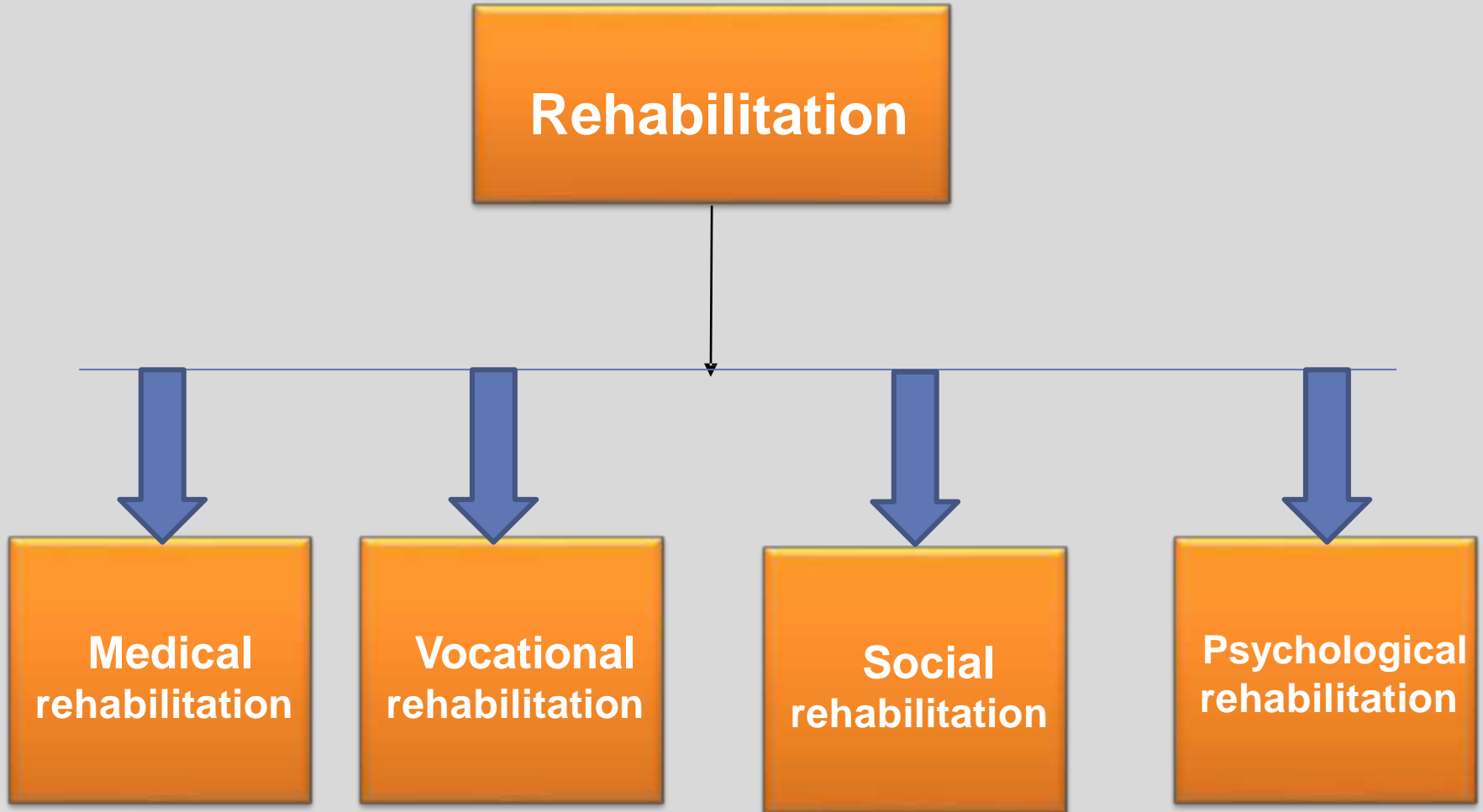
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(ii) Rehabilitation



- **Rehabilitation is “ the combined and coordinated use of medical, social, educational, and vocational measures for training and retraining the individual to the highest possible level of functional ability.”**
- **Requires cooperation from different sections of society.**

Types of Rehabilitation





Cont...

- **Medical rehabilitation: (restoration of Bodily Function).**
- **Vocational rehabilitation:(restoration of the capacity to earn a livelihood)**
- **Social rehabilitation: (restoration of family and social relationship).**
- **Psychological rehabilitation: (Restoration of personal dignity and confidence).**

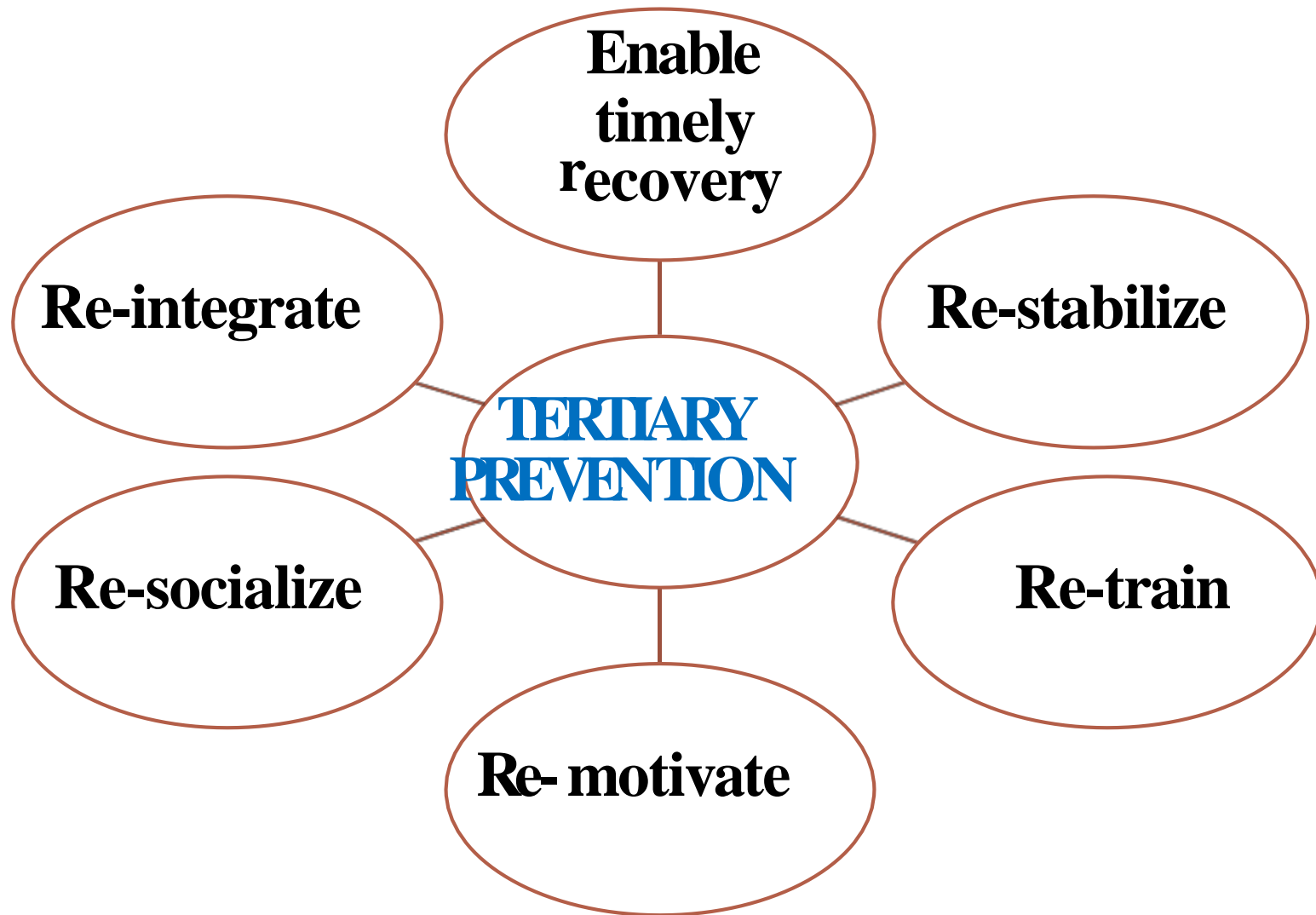


Examples of Rehabilitation



- **Establishing schools for the blind.**
- **Exercises in neurological disorders**
- **Prosthetic restoration of lost tooth**
- **Reconstructive surgery in Leprosy.**
- **Change of profession for a more suitable one and modification of life in general in the case of**
 - **TB,etc.,**

Principles of Rehabilitation



Strategy of Prevention

