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PG DEPARTMENT OF SOCIAL WORK

SUBJECT NAME: COMMUNITY HEALTH

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SEMESTER: IV

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SEM- IV SPECIALIZATION PAPER- COMMUNITY HEALTH- HBWDC

UNIT 1

Concepts related to Health: Definition of Health, Concept of Well-being, Health Spectrum, Health indicators, Social Determinants of health; Hygiene, Sanitation and Health; Meaning of disease, sickness/illness, and Sick role; Definition of Public Health, changing concepts in Public Health, Primary health care and Principles of Primary Health Care; Health Perspective - Human Development Index; The Sustainable Development Goals related to health.

HEALTH INDICATORS

Indicator = Variable (A variable which helps to measure directly and indirectly

A health indicator is a measure designed to summarize information about a given priority topic in population health or health system performance.:

Hygiene: Hygiene is a series of practices performed to preserve health. According to the World Health Organization (WHO), "Hygiene refers to conditions and practices that help to maintain health and prevent the spread of diseases."[2] Personal hygiene refers to maintaining the body's cleanliness.

SANITATION AND HEALTH

Sanitation refers to public health conditions related to clean drinking water and adequate treatment and disposal of human excreta and sewage

Some 827 000 people in low- and middle-income countries die as a result of inadequate water, sanitation, and hygiene each year, representing 60% of total diarrhoeal deaths. Poor sanitation is believed to be the main cause in some 432 000 of these deaths.

Diarrhoea remains a major killer but is largely preventable. Better water, sanitation, and hygiene could prevent the deaths of 297 000 children aged under 5 years each year.

Open defecation perpetuates a vicious cycle of disease and poverty. The countries where open defection is most widespread have the highest number of deaths of children aged under 5 years as well as the highest levels of malnutrition and poverty, and big disparities of wealth.

HUMAN DEVELOPMENT INDEX

HDI is a statistic composite index of Life Expectancy, Education, & per capita income indicators which are been calculated for finding the ranking. Developed by Pakistani

Economist MahbubUlHaq, further used by UNDP. If lifespan, education level & Gross National Income is high the the country will be in high rankings. Out of 189 countries India Ranked 131 in HDI- UNDP. Value: 0.645- medium. India dropped two ranks by 2019/2020

Norway holds 1st place with steady in change & with 0.957 value, 2nd Ireland with 0.955 value & increase in change, Germany in 6th place and with decrease in change. TN is in 12th position with Rs.1,93,964 (NSDP- Ministry of Finance)

Sustainable Development Goal (SDG)

The Sustainable Development Goals (SDGs) or the "2030 Agenda" is the universal call for action for better health, end poverty and ensure that all people enjoy peace and prosperity. SDG's is a collection of 17 goals otherwise known as the Global Goals with 169 targets. Out of which goal 3 solely focus on health, which is "to ensure healthy lives and promote well-being for all age group." SDG3 comprises 13 targets, including four listed as "means-of-implementation" targets. The other selected goals which highlights health related targets includes end of malnutrition in all form, achieving universal and equitable access safe drinking water and, hygiene and sanitation.

The 17 goals

Goal 1: No Poverty

Goal 2: Zero Hunger

Goal 3: Good Health and Well-Being for people

Goal 4: Quality Education

Goal 5: Gender Equality

Goal 6: Clean Water and Sanitation

Goal 7: Affordable and Clean Energy

Goal 8: Decent Work and Economic Growth

Goal 9: Industry, Innovation and Infrastructure

Goal 10: Reduced Inequalities

Goal 11: Sustainable Cities and Communities

Goal 12: Responsible Consumption and Production

Goal 13: Climate Action

Goal 14: Life below Water

Goal 15: Life on Land

Goal 16: Peace, Justice and Strong Institutions

Goal 17: Partnerships for the Goals

TARGETS: SDG3: Ensure healthy lives and promote well-being for all ages

3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.

3.2 By 2030, end preventable deaths of new-borns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.

3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.

3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.

3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.

3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents.

3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes.

3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

Means-of-implementation" targets

3.a Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate

3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all

3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States

3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks

Selected health-related targets outside SDG3

1. **Target 2.2**:**Zero Hunger** By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children less than 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons
2. **Target 6.1 Clean Water & Sanitation**: By 2030, achieve universal and equitable access to safe and affordable drinking-water for all
3. **Target 6.2**: By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
4. **Target 7.1 Affordable & Clean Energy:** By 2030, ensure universal access to affordable, reliable and modern energy services.
5. **Target 11.6Sustainable Cities and Communities:** By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management
6. **Target 13.1 Climate Action**: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

7. **Target 16.1Peace, Justice and Strong Institutions**: Significantly reduce all forms of violence and related death rates everywhere
8. **Target 17.19Partnerships for the Goals:** By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries

UNIT -II

Assessment, Intervention; Psychological and social factors: Other diseases Tuberculosis, Skin diseases, Cancer, Herpes, STD, Liver disorders, steroids; physical examination; emphasis on gender sensitivity; Transgender issues; laboratory investigations, risk factors and contacts

TUBERCLOSIS:

Tuberculosis -- or TB, as it's commonly called -- is a contagious infection that usually attacks your lungs. It can spread to other parts of your body, like your brain and spine. A type of bacteria called Mycobacterium tuberculosis causes it.

Tuberculosis Types

A TB infection doesn't mean you'll get sick. There are two forms of the disease:

Latent TB. You have the germs in your body, but your immune system stops them from spreading. That means you don't have any symptoms and you're not contagious. But the infection is still alive in your body and can one day become active. If you're at high risk for re-activation -- for instance, you have HIV, your primary infection was in the past 2 years, your chest X-ray is abnormal, or your immune system is compromised --- your doctor will treat you with antibiotics to lower the risk for developing active TB.

Active TB. This means the germs multiply and can make you sick. You can spread the disease to others. Ninety percent of adult cases of active TB are from the reactivation of a latent TB infection.

ASSESMENT:

- doctor will use a stethoscope to listen to the lungs and check for swelling in the lymph nodes.
- They will also ask about symptoms and medical history as well as assessing the individual's risk of exposure to TB.
- The most common diagnostic test for TB is a skin test where a small injection of PPD tuberculin, an extract of the TB bacterium, is made just below the inside forearm.
- The injection site should be checked after 2-3 days, and, if a hard, red bump has swollen up to a specific size, then it is likely that TB is present.
- Unfortunately, the skin test is not 100 percent accurate and has been known to give incorrect positive and negative readings.
- However, there are other tests that are available to diagnose TB. Blood tests, chest X-rays, and sputum tests can all be used to test for the presence of TB bacteria and may be used alongside a skin test.

INTERVENTION

- Doctors will prescribe several special medications that you must take for six to nine months.
- Standard therapy for active TB consists of a six-month regimen:
    - two months with Rifater (isoniazid, rifampin, and pyrazinamide);
    - four months of isoniazid and rifampin (Rifamate, Rimactane);
    - and ethambutol (Myambutol) or streptomycin added until your drug sensitivity is known (from the results of bacterial cultures).

SPECIFIC INTER VENTIONS

- Chemotherapy
- Prophylactic treatment-Antibiotics
- Vaccination
- Preventive chemotherapy

SKIN DISEASE

Skin disease, any of the **diseases** or **disorders** that affect the human **skin**. They have a wide range of causes. Visible alterations in the texture of the **skin**, such as rashes and hives, can be indicative of serious **disease**

ASSESMENT

The most common skin tests include:

- **Patch testing:** Patch tests are used to help diagnose skin allergies. Identified allergens (substances that a person may be allergic to) are applied to the skin on the back with adhesive patches and left for a period of time. The skin is then examined for any reaction.
- **Skin biopsy :** Skin biopsies are performed to diagnose skin cancer or benign skin disorders. During a skin biopsy, skin is removed (after a local anesthetic is applied) and is taken to a laboratory for analysis. Skin may be removed with a scalpel, Gillette blue blade, or a cylindrical punch biopsy tool. Stitches may be used to close the wound.
- **Culture:** A culture is a test that is done to identify the microorganism (bacteria, fungus, or virus) that is causing an infection. Skin (surface scrapings, biopsies, contents of pus bumps and blisters), hair, or nails may be cultured to detect bacteria, fungi, or viruses.

INTERVENTION

Many skin disorders are treatable. Common treatment methods for skin conditions include:

- antihistamines
- medicated creams and ointments
- antibiotics
- vitamin or steroid injections
- laser therapy
- targeted prescription medications

CANCER

In the most basic terms, cancer refers to cells that grow out-of-control and invade other tissues. Cells become cancerous due to the accumulation of defects, or mutations, in their DNA. Certain:

- inherited genetic defects (for example, BRCA1 and BRCA2 mutations),
- infections,
- environmental factors (for example, air pollution), and
- poor lifestyle choices -- such as smoking and heavy alcohol use -- can also damage DNA and lead to cancer.

ASSESMENT

- **Physical exam.** Your doctor may feel areas of your body for lumps that may indicate a tumor. During a physical exam, he or she may look for abnormalities, such as changes in skin color or enlargement of an organ, that may indicate the presence of cancer.
- **Laboratory tests.** Laboratory tests, such as urine and blood tests, may help your doctor identify abnormalities that can be caused by cancer. For instance, in people with leukemia, a common blood test called complete blood count may reveal an unusual number or type of white blood cells.

- **Imaging tests.** Imaging tests allow your doctor to examine your bones and internal organs in a noninvasive way. Imaging tests used in diagnosing cancer may include a computerized tomography (CT) scan, bone scan, magnetic resonance imaging (MRI), positron emission tomography (PET) scan, ultrasound and X-ray, among others.

- **Biopsy.** During a biopsy, your doctor collects a sample of cells for testing in the laboratory. There are several ways of collecting a sample. Which biopsy procedure is right for you depends on your type of cancer and its location. In most cases, a biopsy is the only way to definitively diagnose cancer.

  In the laboratory, doctors look at cell samples under the microscope. Normal cells look uniform, with similar sizes and orderly organization. Cancer cells look less orderly, with varying sizes and without apparent organization.

INTERVENTION

- **Adjuvant treatment.** The goal of adjuvant therapy is to kill any cancer cells that may remain after primary treatment in order to reduce the chance that the cancer will recur.
- **Palliative treatment.** Palliative treatments may help relieve side effects of treatment or signs and symptoms caused by cancer itself. Surgery, radiation, chemotherapy and hormone therapy can all be used to relieve signs and symptoms.

- **Surgery.** The goal of surgery is to remove the cancer or as much of the cancer as possible.
- **Chemotherapy.** Chemotherapy uses drugs to kill cancer cells.
- **Radiation therapy.** Radiation therapy uses high-powered energy beams, such as X-rays, to kill cancer cells. Radiation treatment can come from a machine outside your body (external beam radiation), or it can be placed inside your body (brachytherapy).
- **Bone marrow transplant.** Bone marrow transplant is also known as a stem cell transplant. Your bone marrow is the material inside your bones that makes blood cells. A bone marrow transplant can use your own cells or cells from a donor.
- **Immunotherapy.** Immunotherapy, also known as biological therapy, uses your body's immune system to fight cancer.
- **Hormone therapy.** Some types of cancer are fueled by your body's hormones. Examples include breast cancer and prostate cancer. Removing those hormones from the body or blocking their effects may cause the cancer cells to stop growing.

- **Targeted drug therapy.** Targeted drug treatment focuses on specific abnormalities within cancer cells that allow them to survive.
- **Clinical trials.** Clinical trials are studies to investigate new ways of treating cancer. Thousands of cancer clinical trials are underway.

PSYCHOLOGICAL INTERVENTION

- DABDA
  Denial Anger Bargaining Depression Acceptance

SOCIAL INTERVENTION

- Belongingness
- Social awareness

HERPES

- Herpes is the name of a group of viruses that cause painful blisters and sores. The most common viruses are:
- Herpes zoster – causes chickenpox and shingles
- Herpes simplex virus (HSV) type 1 and type 2 – causes cold sores or fever blisters around the mouth and sores on the genitals (sexual organs).
- Genital herpes is a sexually transmitted infection (STI). Once you are infected, you have the virus for the rest of your life.

ASSESMENT

- This type of virus is generally diagnosed with a physical exam. Your doctor may check your body for sores and ask you about some of your symptoms.
- Your doctor may also request HSV testing. This is known as a herpes culture. It will confirm the diagnosis if you have sores on your genitals. During this test, your doctor will take a swab sample of fluid from the sore and then send it to a laboratory for testing.
- Blood tests for antibodies to HSV-1 and HSV-2 can also help diagnose these infections. This is especially helpful when there are no sores present.

INTERVENTION:

- There is currently no cure for this virus. Treatment focuses on getting rid of sores and limiting outbreaks. acyclovir
- famciclovir
- valacyclovir

These medications can help people infected with the virus reduce the risk of transmitting it to others.

PSYCHOLOGICAL & SOCIAL INTERVENTIONS

- stress
- menstrual periods
- fever or illness
- sun exposure or sunburn
- unprotected Sex

STD

An infection transmitted through sexual contact, caused by bacteria, viruses or parasites.

ASSESMNET

- Blood tests. Blood tests can confirm the diagnosis of HIV or later stages of syphilis.
- Urine samples.
- Fluid samples. If you have open genital sores, your doctor may test fluid and samples from the sores to diagnose the type of **infection**

INTERVENTIONS

- **Antibiotics**. **Antibiotics**, often in a single dose, can cure many sexually transmitted bacterial and parasitic infections, including **gonorrhea**, syphilis, **chlamydia** and trichomoniasis. ...
- Antiviral drugs.

SPECIAL INTERVENTIONS

1) Drug licensure and uptake of immunization against STD

(2) validation of male circumcision as a potent prevention tool against acquisition of HIV and some other sexually transmitted infections (STIs)

(3) encouragement about the use of antiretroviral agents as preexposure to reduce risk of HIV and herpes simplex virus acquisition

(4) enhanced emphasis on expedited partner management and rescreening for persons infected

(5) recognition that behavioural interventions will be needed to address a new trend of sexually transmitted hepatitis C among men who have sex with men

LIVER DISEASE/ DISORDERS

There are many kinds of liver diseases:

- Diseases caused by viruses, such as hepatitis A, hepatitis B, and hepatitis C.
- Diseases caused by drugs, poisons, or too much alcohol. Examples include fatty liver disease and cirrhosis.
- Liver cancer.
- Inherited diseases, such as hemochromatosis and Wilson disease

ASSESMNET

- Blood tests. A group of blood tests called liver function tests can be used to diagnose liver disease. Other blood tests can be done to look for specific liver problems or genetic conditions.
- Imaging tests. An ultrasound, CT scan and MRI can show liver damage.
- Tissue analysis. Removing a tissue sample (biopsy) from your liver may help diagnose liver disease and look for signs of liver damage. A liver biopsy is most often done using a long needle inserted through the skin to extract a tissue sample. It is then analyzed in a laboratory.

INTERVENTION

liver problems can be treated with lifestyle modifications, such as stopping alcohol use or losing weight,typically as part of a medical program that includes careful monitoring of liver function. Other liver problems may be treated with medications or may require surgery.

GENDER SENSITISATION:

Sex indicates biological characteristics of man and woman .

Gender indicates the characteristics, positions and roles of man and woman in all social relationships

Difference Between Gender and Sex

SEX- Biologically determined • Universal for all human beings • Unchanging • Inborn (by Birth)

GENDER - Constructed by society • Multi-faceted differs within and between cultures • Dynamic, changes over time • Acquired

WHAT IS GENDER SENSITIZATION?

- Modification of behaviour
- To behave in a manner which is sensitive to gender justice
- Changing behaviour and instilling empathy
- Helps people in examining their personal attitudes
- Against sexual harassment at workplace

AIM OF GENDERSENSITZATION

The aim of GS is to make people aware of the power relationship btwn men and women in the society and to understand the importance of affording men and women equal opportunities and treatment.

The Indian Society still have traditional minds like

- Male superior to female
- School dropouts

- Female eating the leftovers of the food of a male

- Serving the food first to the male in the family during dining

- Boysshould't cry.
- Men don't cook food
- You should wear certain types of clothes to be safe.
- Women should take care of their families only
- Boys shouldn't mingle with girls.
- Married women should have children early.
- Men should look after the Finances and Women should take care of Home.

Gender stereotypes are the beliefs that people have about the characteristics of males and females. The content of stereotypes varies over cultures and over time. These expectations are often related to the roles that the sexes fulfill in the culture.

Gender inequality acknowledges that men and women are not equal and that gender affects an individual's living experience. These differences arise from distinctions in biology, psychology, and cultural norms. Some of these distinctions are empirically grounded while others appear to be socially constructed

This can be achieved by conducting various sensitization campaigns, workshop, program etc. sensitization in the domain of "humanities and social Sciences, is seen as "the awareness informed disposition or propensity **to behave in a manner which is sensitive to gender justice and equality issues.**

Constitutional Provisions

The Constitution of India contains various provisions, which provide for equal rights and opportunities for both men and women.

The salient features are:-

- Article 14 guarantees that the State shall not deny equality before the law and equal protection of the laws;
    - Article 14 guarantees that the State shall not deny equality
- Article 15 prohibits discrimination against any citizen on the ground of sex
- Article 16 empowers the State to make positive discrimi-nation in favour of women and children

- Article 17rovides for Equality of Opportunity in matters of public employment;•
- Article 23 prohibits trafficking in human beings and forced labour
- Article 39 (a) and (d) enjoins the State to provide equal means of livelihood and equal pay for equal work

TRANSGENDER

"Transgender" is an umbrella term that describes people whose gender identity or expression does not match the sex they were assigned at birth. For example, a transgender person may identify as a woman despite having been born with male genitalia.

Transgender issues

- Discrimination in Public Accommodations- Public accommodations are places accessible to the public, such as retail stores, restaurants, parks, hotels, libraries, movie theatres, and banks.
- Discrimination in Employment- Transgender people experience pervasive discrimination at work. Between 13% and 47% of transgender workers report being unfairly denied a job,10 and 78% report being harassed, mistreated, or discriminated against at work.
- Discrimination in Education -Schools, colleges are difficult places for transgender students as they regularly face discrimination, bullying, and harassment in elementary, secondary, and postsecondary institutions. In one survey, 40% of gender nonconfirmingyoutha reported being frequently harassed by their peers and 37% reported frequent verbal harassment and name calling.31 In another survey, 33% of all students reported frequently hearing anti-transgender slurs.32 The same study found that levels of physical and verbal harassment were very high among surveyed students (see Figure 5 on the next page). This harassment, bullying, and discrimination have a cumulative negative effect on education and achievement for transgender people:
- family rejection
- trans people face discriminatory policies about health care coverage and discrimination from health care professionals.
- Fear of using public bathrooms is particularly prominent among trans people
- Sexual Abuse

- Filling out forms
- Social security issues
    - Lack of welfare schemes
    - Harassment
    - Lack of asses to health insurance schemes

UNIT-III

Health Programmes & Policy: National Health programmes: NRHM, Family Welfare, Maternal and Child Health, ICDS, School health programmes, AIDS control programmes, National and International Organisations related to health: ICMR, WHO, UNICEF, Red Cross, RNTCP.Welfare measures for the Differently Abled, State Health programmes for the weaker sections. National Health Policy 2002; Population Policy; ESI Act 1975**;** Health care systems in India - Levels of Health Care-Primary, Secondary and Tertiary levels, NRHM, AYUSH

Revised national tuberculosis control programme (RNTCP) in India

Control of tuberculosis (TB) in India has come a long way since the initiation of the National TB Programme (NTP) in 1962. Despite the establishment of more than 440 District TB Centers, the NTP suffered from several serious drawbacks including managerial weaknesses, inadequate funding, overreliance on chest radiographs, lack of standardized treatment regimens, low rates of treatment completion, and lack of systematic information on treatment outcomes. The cure rate was dismally low-only 30% of all patients were diagnosed, whom of only 30% were treated successfully.[1] This prompted the Government of India, in collaboration with the World Health Organization (WHO) to evolve a revised strategy for the control of tuberculosis in India. The Revised National TB Control Programme (RNTCP), an application of the WHO recommended Directly Observed Treatment, Short Course (DOTS) strategy was launched in 1992 with the objective of detecting at least 70% of new sputum positive TB patients and curing at least 85% of such patients.

The basic principles of RNTCP[2] are:

1. Political commitment for ensuring adequate funds, staff and other key inputs.
2. Establishment of diagnosis primarily by microscopic examination of specimens obtained from patients presenting to health care facilities.
3. Regular and uninterrupted supply of anti-TB drugs in the form of a patient-specific box that contains the medicines for the entire course of treatment so that no patient is subjected to interruption of treatment for lack of medicines.
4. Direct observation of every dose of treatment in the intensive phase and of at least the first dose in the continuation phase of treatment.

5. Systematic monitoring, supervision and cohort analysis-one Senior Treatment Laboratory Supervisor (STLS) is responsible for organization of uninterrupted treatment and one Senior Tuberculosis Laboratory Supervisor for ensuring quality laboratory service for every 5,00,000 population.

Programme Expansion and Current Coverage

The initial implementation of RNTCP started in 1993 with a population coverage of 2.35 million at 5 sites in different states (Delhi, Kerala, West Bengal, Maharashtra and Gujarat). Its expansion continued in the following years with population coverage reaching 13.85 million in 1995. The phase of rapid expansion that occurred in 1998 has continued till date [Table 1] &[Table 2] and currently, more than 90% of India's population has been covered under RNTCP including full coverage of 26 States and Union Territories. It is expected that the entire country should get covered by the end of the current year.

Comparison with DOTS Programmes in Other Countries

RNTCP is the largest and the fastest expanding DOTS programme in the world and approximately 100,000 patients are being initiated on treatment every month. The WHO report on Global Tuberculosis Control in 2005 [3] remarks that "India, the country with the greatest burden of TB, is also the country where the most dramatic advances are being made in DOTS expansion." In 1999, the Indian expansion of RNTCP accounted for 1/3 and in 2000 and 2001 for over 1/2 of the global increase in DOTS coverage.

Despite the rapid expansion, quality of services has been maintained and phased implementation of the programme is in part responsible for this. Infact, there has been a considerable improvement in the level of case detection and India has made a greater contribution to the global increase in case finding than any other country since 2000.

During 2004, sputum positive case detection and treatment success rates were 72% and 86% respectively-both being higher than their respective global targets. Improvement in treatment success rates since the implementation of RNTCP have lead to reduction in death rates by 7-fold from 29% to 4% [2] The improvement in cae detection

n and treatment has also been witnessed in extra-pulmonary and retreatment cases. In the third quarter of 2004, extra-pulmonary cases comprised 14% of all new case while re-treatment cases comprised 25% of all smear positive cases. [4]

RNTCP's progress has been remarkable not only because of the expansion in population coverage and case detection but also because it has been made at a lower than predicted cost. The budget per patient is lowest in India among all the countries that have a high burden of disease (US$ 34 vis-Mvis US$ 100200 for all such countries).

A major achievement of RNTCP has been the involvement of individuals and organizations other than the government employees and bodies.

1. Private Practitioners & **Non Government Organizations (NGOs) -** It has often been observed that practices of private health providers are associated with inappropriate diagnostic preferences, inaccurate interpretations of results of laboratory and other diagnostic tests, incomplete or non-disclosure of the disease(s) to patients, institution of inappropriate treatment and tendency to overtreat. With specific reference to TB and its control, in the past, private practitioners had a tendency to deviate from the recommended TB case management principles including sole reliance on chest radiography for diagnosis, infrequent use of sputum microscopy (both for diagnosis as well as monitoring of treatment) and prescription of inappropriate drug regimens (including incorrect combination or doses of drugs as well as inappropriate duration of treatment) resulting in poor treatment outcomes. [5],[6] In addition, failure on their part to notify detected cases, maintain records properly or make an effort to trace treatment defaulters made the task of TB control by the government agencies more difficult.

However, it was soon realized that there was no getting away from the ground reality that majority of patients first approach a private health practitioner at the onset of an illness. In cases of tuberculosis, these rates have been reported to be as high as 86% in India [7] . This propensity of patients to dislike and not utilize public health facilities and instead approach services of private health providers, despite the latter being more expensive, could be partly responsible for less than-expected progress despite adequate governmental spending. [8]

A landmark study from Hyderabad [9] showed that collaboative effort between private practitioners and the government can help to implement DOTS effectively. A non-profit

hospital covering a population of over 500,000 encouraged 358 allopathic and non-allopathic physicians practicing in the area to participate in tuberculosis detection and treatment by referring patients to the hospital. Though no financial incentives were offered, 59% of these practitioners referred patients to the hospital and 43% of all referred patients had tuberculosis. Diagnosis, treatment, and case and outcome definitions were performed as per DOTS policies-medicines and laboratory reagents being provided by the government. DOTS was administered either at the hospital or 30 other small hospitals operated by these private practitioners. This lead to a 4 fold increase in TB detection rate over the first 2-3 years of the project with 90% of new smearpositive patients and 77% of re-treatment patients being successful.

Significant progress has been made subsequently in the area of involvement of private practitioners in RNTCP. The roles of private practitioners in the different aspects of RNTCP viz referral, provision of DOTS, functioning as designated paid/free microscopy centres (microscopy alone or with treatment) have been defined now [10]. To ensure smooth functioning, the roles of District Tuberculosis Centres as well as the Grant-in-Aid and Eligibility Criteria for the private practitioners have been simultaneously specified.

Similar guidelines have been issued in order to achieve uniformity in the involvement of NGOs. [2] The various schemes available for involvement of NGOs include Health Education and Community Outreach, Provision of DOTS, In-Hospital Care for TB patients, functioning as Microscopy and Treatment centre or as TB unit Model. Till date, over 1000 NGOs and over 5,000 private practitioners have been involved in RNTCP activities and the process of spreading this private-public mix to larger areas of the country is underway [11].

2. **Community Volunteers -** Besides private health practitioners and NGOs, volunteers from the comunity can also make significant contributions to control of tuberculosis. These volunteers can be from any socio-economic strata or profession but one of the key determining factors remains their acceptability to the patient [12]. Their commitment as DOTS providers also needs to be ensured and supervision by district TB programme officials is usually done. A WHOGovernment of India (GOI) study from Haryana [13] reported that treatment success rate of new sputum smear-positive patients receiving DOTS from community volunteers was comparable with that of patients receiving DOTS from government health workers (78% and 77% respectively). The primary responsibility for

returning late patients to treatment was with the staff of the District TB Centre in this urban model for community volunteer involvement and concerns were expressed whether it could be applied to rural settings or even urban centers with the volunteers given charge of tracing and returning late and/or defaulting patients to treatment. Formal guidelines with respect to involvement of community volunteers are likely to be issued only when the above mentioned issued get resolved with field studies carried out on a larger scale in the future. Financial compensation to the volunteers would remain an important component of such guidelines.

3. Consultants - Appointment of consultants to monitor DOTS expansion and implementation has also met with considerable success especially in areas where difficulties were anticipated. Reduction in the median time required for initiation of DOTS services, higher rates of sputum conversion and higher treatment success rates were observed in areas where consultants were present in comparison to those without [14] . In addition to providing technical assistance to the state and district TB offices, these consultants also act as links between the national level and state/ district level programme staff [15] . However once the phase of rapid expansion in India is over and population average approximates 100%

4. Medical Colleges & **Corporate Hospitals** - Last but not the least has been the areas of involvement of hospitals other than those in the Public Health Department including hospitals of the Indian Railways, ESI hospitals and Port hospitals. National, State and Zonal Task Factors have been established in order to increase the involvement of medical colleges with RNTCP. Priority activities that can be undertaken by medical colleges include training cum-teaching of medical professionals and other staff for RNTCP, delivery of services of RNTCP, advocacy of RNTCP and operational research. Professors in medical colleges can not only serve as role models for practicing physicians but also sensitize medical students to the problem of TB control and this can lead to significant improvement in the level of involvement as well as commitment of medical professionals with RNTCP. The number of medical colleges and corporate health facilities participating in RNTCP have crossed 200 and 100.

Challenges for Achievement of Optimal Programme Performance

One of the most important constraints for maintenance of quality TB services by RNTCP is shortage of staff resulting from its rapid expansion phase. Till the time additional technical staff gets recruited - a process that normally takes a long time in the government set up-the

current staff can be redistributed to areas that are relatively understaffed and their capacity increased through training programmes run by expert consultants. Sustained political commitment is needed to ensure that the recruitment process is expedited and RNTCP remais adequately staffed at all levels.

Upgradation of existing TB laboratories and creation of new microscopy centres are part of the efforts to strengthen the TB laboratory network - an essential requirement of the expanding RNTCP. At present more than 1000 laboratories provide diagnostic facilities throughout the country. An External Quality Assessment (EQA) for sputum microscopy that is based on international guidelines has been adopted since 2004 for the microscopy laboratory network and it includes a random blinded crosscheck of routine slides each month [2],[3] . Though unblinded rechecking of smear by STLS yields a 95 to 100% agreement with what was reported by laboratory technicians, blinded rereading/restaining at a national can lead to reduction in the false positive errors from 27% to 7%.

Improvement in indicators of treatment associated parameters is of paramount importance in order to achieve betterment and even maintain established goals of case detection and treatment. It is therefore necessary to identify factors other than those related to drug therapy and drug resistance which could be affecting these parameters.

A recently published retrospective study from Delhi [18] (n=2938) showed that initial bacillary load can influence sputum conversion rates and treatment outcome of new smear positive pulmonary tuberculosis patients treated by DOTS. Sputum conversion rates among patients with sputum gradation of 3+ were 62.2% and 81.3% respectively at the end of 2 & 3 months. These were significantly lower when compared to rest of the patients (sputum gradations of 1+/ 2+) for whom conversion rates were 76.8% and 89.5% respectively. Cure rates were lower (76.6% vs. 85.1%) and failure rates were higher (7.7% vs. 4.5%) for patients with 3+ gradations of sputum. Further studies might be needed to investigate and confirm this finding and assess whether there is a need to separately categorize patients with higher bacillary load.

Other socioeconomic factors that have been identified in previous studies done among patients on DOTS in India include smoking with relapse [19] , alcoholism, old age and poverty with default [20],[21],[22] and malnutrition with death. [20] It is unclear to what extent these factors affect the functioning of RNTCP especially with respect to treatment related

parameters, whether any form of intervention designed to identify (and if possible modify) some or all of them can lead to significant improvements in these parameters and if yes, whether such interventions are feasible under national programme conditions.

Treatment of multi drug resistant (MDR) cases ('DOTS PLUS') and utilisation of DOTS in patients with HIV-TB co-infection are areas that are likely to receive more attention once the rapid expansion phase of RNTCP is over. These areas require significantly higher financial inputs and infrastructure availabilities and yet treatment is associated with poorer outcomes. However, without adequate efforts in both areas, overall treatment success rates of TB may not improve and can even fall. RNTCP has collaborated with National AIDS Control Organization (NACO) and implemented a Joint Action Plan (JAP) since 2001 that now covers 14 states where the level of HIV prevalence is high. Service delivery coordination and cross referral is one of the most important activities of JAP. The Microscopy-cum DOTS centre of RNTCP and the Voluntary Counseling and Testing Centre of NACO are likely to be the key establishments in the process of treatment and referral. Carrying out of drug resistance surveillance (DRS) surveys and establishment of quality assured culture and drug sensitivity testing (DST) laboratory facility in large states along with provision of second line drugs for treatment of drug resistant cases are activities likely to be given more thrust as part of DOTS Plus Strategy.

Though India occupies only 2% of the land area of the world, it holds the dubious distinction of having the most number of TB cases worldwide. As RNTCP's population coverage increases to the whole country, maintaining quality of service will be an important priority and this requires not only effective supervision and monitoring strategies but also recruitment of additional staff as well as improvement in the laboratory support for the expanding services. Efforts at increasing case detection as well as rates of treatment completion and cure will also play a crucial role and possibly determine the degree of success that RNTCP achieves in the control of tuberculosis in the years to come.

WHO- World Health Organisation

WHO works worldwide to promote health, keep the world safe, and serve the vulnerable.Our goal is to ensure that a billion more people have universal health coverage, to protect a billion

more people from health emergencies, and provide a further billion people with better health and well-being.

For universal health coverage, we:

- focus on primary health care to improve access to quality essential services
- work towards sustainable financing and financial protection
- improve access to essential medicines and health products
- train the health workforce and advise on labour policies
- support people's participation in national health policies
- improve monitoring, data and information

For health emergencies, we:

- prepare for emergencies by identifying, mitigating and managing risks
- prevent emergencies and support development of tools necessary during outbreaks
- detect and respond to acute health emergencies
- support delivery of essential health services in fragile settings.

For health and well-being we:

- address social determinants
- promote intersectoral approaches for health
- prioritize health in all policies and healthy settings.

Through our work, we address:

- human capital across the life-course
- noncommunicable diseases prevention
- mental health promotion
- climate change in small island developing states
- antimicrobial resistance
- elimination and eradication of high-impact communicable diseases.

HEALTHCARE SYSTEM IN INDIA

Introduction:

Healthy citizens are the greatest assets any country can have" Winston S. Churchill Health is a state subject as per the constitution of India. It is the responsibility of every state to make efforts for raising the health standard and standard of living of the targeted population and the advancement of public health as its primary function. Access to health care depends on how health care is provided. In India, the health care sector shows a tremendous improvement, since last few decades. This can be illustrated by the notable improvement in health indicators such as infant mortality ,maternal mortality, and life expectancy at birth etc. Despite these improvements, India still faces many issues and gaps in the healthcare delivery system

Every country has its own health care system, in accordance with their needs and resources, but the most common element is primary health care. In some countries, health care system is distributed among government agencies, private agencies, charitable institutions, religious organizations to deliver good health care services. 25 The Indian health care system comprises private owned hospitals, health personnel, medical colleges, program manager, etc. The health care system consists of all the actions and individual whose main function is to provide quality health care services and to improve health status. The health personnel, hospitals, and healthcare agents have grown explosively in this century. These agents contributed to better health, specifically for the poor. It is, therefore, needful to assess the current performance of healthcare system in India. The vital element of any health care system is the good service delivery system. Thus, good healthcare service delivery is, therefore, playing a crucial role and act as a fundamental input to population health status

Healthcare is one of the largest service sectors in India. However, healthcare sector can be viewed as a glass half empty or a glass half full. The healthcare system faces some challenges that are, reduction in mortality rates, improved infrastructure, availability of health personnel, etc. There is a considerable shortage of hospitals, hospital beds, and trained medical staff such as doctors and nurses, and so the accessibility among the public is not so good. The rural-urban imbalance also hampers access to health care services. In rural areas, the accessibility is significantly lower as compared to urban areas. Children and women are under-represented in the health care workforce.

The majority of the Indian population lives in rural areas below the poverty line and they even don't have enough resources to finance their healthcare expenditure. The public health care sector is very poor and responsible for such health status of Indians. The private healthcare sector is mainly responsible for the majority of healthcare in our country. Out of total expenses on health, most of the expenses are paid out of pocket by patients and their relatives. According to NFHS-3, the private healthcare sector still remains the primary source of healthcare for almost 70 per cent of urban households and 63 percent of rural households. Almost 44 percent of all children are under-nutrition and maternal and child mortality rates are significantly higher, despite the big efforts by the government.

One of the main reasons why people rely more on private health care providers rather than public health care providers is that the public healthcare sector offers poor quality of care. The reason for the poor quality care of the public health care system is the distance of primary health centers (PHCs), community health centers (CHCs), and 26 sub-centers (SCs). Indian health care system disappointed Indians especially rural people at various levels. Although the Indian health care system consists or has the best technologies and doctors, it still faces the lack of infrastructure in terms of PHCs, CHCs, and SCs

The Indian public healthcare system consists of primary, secondary, and tertiary care institutions. Despite many efforts by the government, public healthcare system, i.e. primary, secondary, and tertiary care institutions face substantial challenges in providing care to the care seekers. Thus, it is time to review the current health care system in India, in the light of other developed country's health care system.

Structure of health care system:

The healthcare infrastructure in India consists of primary, secondary, and tertiary health care. The healthcare at these levels is provided by both public and private health care providers. But nowadays there is an increasing role of private healthcare providers in providing care to the care seekers. At the primary level of health care, we include community health centers (CHCs), Primary health centers (PHCs), and subcenters (SCs). While the sub-district hospitals come under the category of secondary health care and the tertiary level of health care includes the district hospitals and medical colleges. With a population of 1.21 billion, India stands at the second position among the most populous countries in the world, after China. India comprises 7 union territories and 29 states. These states and union territories are further sub-divided into districts and blocks. Thus, provision of health care to such a huge

population is the biggest challenge faced by Indian government since after the independence. The provision of health care needs some sound planning and management and also some policies with a strong implementation and management by the government bodies with private health care providers.

While states are responsible for the functioning of the health care delivery system, Centre also has a responsibility towards the state's health care system in the form of policy making, planning, assisting and providing adequate funds to various provincial health authorities to implement national programs. While national level health care system is guided by the Union Ministry of Health and Family Welfare (MoHFW), there is a state department of Health and Family Welfare in each state, headed by a state minister. Each regional set-up covers 3-5 districts and works under the authority delegated by the state directorate of health services. Middle-level management of health services is the district level structure and it is a link between the state and regional structure on one hand and on the other hand is the peripheral structure such as Primary Health Care (PHC) and Sub-Centre (SC)

WELFARE OF DIFFERENTLY ABLED

1.National Identity Card for the differently abled persons

Early Intervention

2. Early Intervention Centre for infants and young children with hearing impairment in 32 districts

3.Early Intervention Centre for the mentally retarded children:

4. Early Intervention Centre for visually impaired

Special Education

5. Special Education

5 (a). Pre school for young hearing impaired children

6 (a) Scholarship

6 (b) Scholarship

7. Readers allowance to visually differently abled persons

8. Scribe assistance

9. Distribution of Pre-recorded Cassettes and Tape recorders changed as CD players with text CD's to visually impaired persons

10. Starting of Degree courses for the hearing impaired students

11. Assistance to Law graduates

12. Cash prize and assistance to pursue higher education for the visually impaired students
13. Cash prize and assistance to pursue higher education for the hearing impaired students
14. Government Institute for the Mentally challenged, Chennai
15. Supply of Braille books
16. Distribution of Lap top computers to +2 differently abled students studying in Government and Government aided schools
17. Honorarium to Teachers
18. Financial assistances to Non Governmental Organisations

Training and Employment

19. Secondary Grade Teachers Training Institute for the Orthopaedically differently abled persons (Diploma in Teacher Education)
20. Diploma in Medical Laboratory Technology training
21. Cell phone Service and Maintenance Training Course
22. Computer Training Course
23. Multimedia Training
24. Training to the visually differently abled persons (male)
25. Training to the speech and hearing impaired (male)
26. Vocational training centre with hostel facilitiy
27. Unemployment allowance to the differently abled persons
28. Self employment
29. Motorised Sewing machines
30. Loan assistance from National Handicapped Finance and Development Corporation (NHFDC)
31. Prime Minister's Employment Generation Programme

3% Reservation in educational institutions and in employment

32. 3% reservation of seats in Educational Iinstitutions
33. Reservation of teaching posts in educational institutions for visually impaired
34. Reservation of jobs in Government Departments / Government Undertakings
35. Reservation of Non Teaching posts in educational institutions for speech and hearing impaired persons

Assistive devices for differently abled persons

36. Tricycles
37. Wheel chairs
38. Hearing aids and Solar rechargeable batteries
39. Goggles and folding sticks
40. Braille watches
41. Calipers and crutches
42. Artificial limbs

43.Retrofitted petrol scooters

44. Modular functional artificial limbs

45. 'Behind the ear' hearing aids

46. Magnifiers

47. Reflecting folding sticks

Maintenance allowance

48. Maintenance allowance to mentally retarded persons

49. Maintenance allowance to differently abled persons (severely affected)

50.Maintenance allowance for persons affected with muscular dystrophy

51. Maintenance allowance for leprosy affected persons

Marriage assistance

52. Marriage assistance to normal persons marrying visually impaired persons

53. Marriage assistance to normal persons marrying orthopaedically differently abled persons

54. Marriage assistance to normal persons marrying speech and hearing impaired persons

55. Marriage assistance to differently abled persons marrying differently abled persons

Other schemes

56. Homes for the mentally retarded above the age of 14 years

57. Government rehabilitation homes

58. Government care camp, Melpakkam

59. Day care centre for persons affected by muscular dystrophy

60. Rescue scheme for persons with mental illness

61 Home for the mentally ill

62.Travel concession to the differently abled persons in state owned transport corporation buses

63. Registration of complaints under persons with disabilities act, 1995

64. Appointment of guardians to special categories of differently abled persons under national trust act, 1999

Social Security Schemes

65. Social security schemes – Tamil Nadu Welfare Board for the differently abled persons

(a) Personal accident relief for differently abled persons

(b) Financial assistance to meet the funeral expenses of a differently abled person:

(c) Financial assistance on the natural death of a differently abled person:

(d) Scholarship to son and daughter of differently abled persons

(e) Assistance for marriage

(f) Assistance for delivery / miscarriage of pregnancy / termination of pregnancy to a female

differently abled person

(g) Assistance for purchase of spectacles by a differently abled person

NEW SCHEMES

1	Establishment of Early Diagnostic Centres for Hearing Impaired in 10 Districts.
2	Installation of Solar power plants in Government Special Schools
3	Establishment of Disability Museum in Chennai
4	Establishment of Model Centre for Persons affected by Muscular Dystrophy at Chennai
5	Providing Power Laundries in Hostels of Government Special Schools
6	Provision of Nutritious Weaning Food and Noon Meal to the Differently Abled Children at Early Intervention Centres.
7	Increasing the number of Trainees for Multi media and Digital Photography Training Programmes.
8	Unemployed Youth Employment Generation Programme - 5% investor contribution on the part of Differently Abled to be borne by the Government
9	Enhancing subsidy under micro and small scale self- employment scheme up to Rs. 10,000/- to the Differently Abled persons.
10	Enhancement of Scholarship Amount
11	Enhancement of Readers Allowance Amount
12	1000 Retrofitted Petrol Scooters to Differently Abled Persons
13	Establishment of Mobile Intervention Units with equipment and skilled professionals to provide services to Differently Abled at their doorstep in all the Districts.

UNICEF

About: UNICEF is mandated by the UN General Assembly to advocate for the protection of children's rights, to help meet their basic needs and to expand their opportunities to reach their full potential. UNICEF is guided by the Convention on the Rights of the Child and strives to establish children's rights as enduring ethical principles and international standards

of behaviour towards children. UNICEF mobilises political will and material resources to help countries, particularly developing countries, ensure a "first call for children" and to build their capacity to form appropriate policies and deliver services for children and their families. UNICEF is committed to ensuring special protection for the most disadvantaged children – victims of war, disasters, extreme poverty, all forms of violence and exploitation and those with disabilities. UNICEF responds in emergencies to protect the rights of children.

Location:

- New Delhi
- Andhra Pradesh and Karnataka
- Gujarat
- Assam
- Jharkhand
- Bihar
- Madhya Pradesh
- Chhattisgarh
- Maharashtra
- Odisha
- Uttar Pradesh
- Rajasthan
- Tamil Nadu
- West Bengal

Focus Areas: Child Development and Nutrition; Child Protection; Education, Child Environment; Polio Eradication; Reproductive and Child Health; Children and AIDS; Social Policy, Planning, Monitoring and Evaluation; Advocacy and Partnership; Behaviour Change Communication; Emergency Preparedness and Response.

Following are the main functions of the UNICEF:

i. UNICEF works for the protection of children in matters of their survival, health and well being. This is done in cooperation with private individuals, civic groups, governments and the private sector.

ii. The UNICEF delivers funds for the training of personnel, including health and sanitation workers, teachers and nutritionists, etc. Universal child immunisation against preventable diseases was one of the chief goals of the UNICEF.

iii. UNICEF supplies technical assistance, equipment and other aids. It provides paper for children's textbooks, medical equipment and medicines for health clinics, pipes and pumps for clean water supply in villages, etc.

iv. UNICEF assists governments in planning, developing and extending community based services in the fields of maternal and child health, nutrition, clean water and sanitation.

v. It provides help to children and mothers caught in emergency situations caused by natural calamities, civil strife, epidemics, etc.

Indian Council of Medical Research (ICMR), India

Member profile

The Indian Council of Medical Research (ICMR), New Delhi, the apex body in India for the formulation, coordination and promotion of biomedical research, is one of the oldest medical research bodies in the world. As early as in 1911, the Government of India set up the Indian Research Fund Association (IRFA) with the specific objective of sponsoring and coordinating medical research in the country. After independence, several important changes were made in the organisation and the activities of the IRFA. It was redesignated in 1949 as the Indian Council of Medical Research (ICMR) with considerably expanded scope of functions. The ICMR is funded by the Government of India through the Ministry of Health & Family Welfare. The Council's research priorities coincide with the National health priorities, such as: control and management of communicable diseases, fertility control, maternal and child health, control of nutritional disorders, developing alternative strategies for health care delivery, containment within safety limits of environmental and occupational health problems; research on major non-communicable diseases like cancer, cardiovascular diseases, blindness, diabetes and other metabolic and haematological disorders; and mental health research and drug research (including traditional remedies). All these efforts are undertaken with a view to reduce the total burden of disease and to promote health and well-being of the population.

Main activities

ICMR promotes biomedical research in the country through intramural as well as extramural research. Over the decades, the base of extramural research and also its strategies have been expanded by the Council. Intramural research is carried out currently

through the Council's (i)21 Permanent Research Institutes/Centres which are mission-oriented national institutes located in different parts of India and address themselves to research on specific areas such as tuberculosis, leprosy, cholera and diarrhoeal diseases, viral diseases including AIDS, malaria, kala-azar, vector control, nutrition, food & drug toxicology, reproduction, immunohaematology, oncology, medical statistics, etc. and (ii) 6 Regional Medical Research Centres which address regional health problems, and also aim to strengthen or generate research capabilities in different geographic areas of the country. Extramural research is promoted by ICMR through: (i) Setting up Centres for Advanced Research in different research areas around existing expertise and infrastructure in selected departments of Medical Colleges, Universities and other non-ICMR Research Institutes; (ii) Task force studies which emphasise a time-bound, goal-oriented approach with clearly defined targets, specific time frames, standardized and uniform methodologies, and often a multicentric structure; and (iii) Open-ended research on the basis of applications for grants-in-aid received from scientists in non-ICMR Research Institutes, Medical colleges, Universities etc. located in different parts of the country.

Links to the health workforce crisis

In addition to research activities, the ICMR encourages human resource development in biomedical research through: research fellowships, short-term visiting fellowships, short-term research studentships, and Various Training Programmes and Workshops conducted by ICMR Institutes and Headquarter

INTEGRATED CHILD DEVELOPMENT SERVICES (ICDS) SCHEME

Integrated Child Development Services (ICDS) scheme is world's largest community based programme. The scheme is targeted at children upto the age of 6 years, pregnant and lactating mothers and women 16–44 years of age. The scheme is aimed to improve the health, nutrition and education (KAP) of the target community. Launched on 2 October 1975, the scheme has completed 25 years of its operational age. The article describes in brief, the organisation, achievements and drawbacks of this national programme. It also suggests various thrust areas for its betterment and further improvement.

Introduction

Paediatric malnutrition has always been a matter of national concern. The various vertical health programmes initiated by the Government of India (GOI) from time to time did not

reach out to the target community adequately. In 1974, India adopted a well-defined national policy for children. In pursuance of this policy it was decided to start a holistic multicentric programme with a compact package of services. The decision led to the formulation of Integrated Child Development Services (ICDS) scheme – one of the most prestigious and premier national human resource development programmes of the GOI.

The scheme was launched on 2 October 1975 in 33 (4 rural, 18 urban, 11 tribal) blocks. Over the last 25 years, it was expanded progressively and at present it has 5614 (central 5103, state 511) projects covering over 5300 community development blocks and 300 urban slums; over 60 million children below the age of 6 years and over 10 million women between 16 and 44 years of age and 2 million lactating mothers [1]. The total population under ICDS coverage is 70 million, which is approximately 7 percent of the total population of one billion.

The main thrust of the scheme is on the villages where over 75 percent of the population lives. Urban slums are also a priority area of the programme.

Objectives

- The main objectives of the scheme are [2]:
- Improvement in the health and nutritional status of children 0–6 years and pregnant and lactating mothers.
- Reduction in the incidence of their mortality and school drop out
- Provision of a firm foundation for proper psychological, physical and social development of the child.
- Enhancement of the maternal education and capacity to look after her own health and nutrition and that of her family
- Effective co-ordination of the policy and implementation among various departments and programmes aimed to promote child development.

Beneficiaries

The beneficiaries are:

- Children 0–6 years of age
- Pregnant and lactating mothers
- Women 15–44 year of age

- Since 1991 adolescent girls upto the age of 18 years for non formal education and training on health and nutrition.

Services

The programme provides a package of services facilities [3] like:

- Complementary nutrition
- Vitamin A
- Iron and folic acid tablets
- Immunization
- Health check up
- Treatment of minor ailments
- Referral services
- Non-formal education on health and nutrition to women
- Preschool education to children 3–6 year old and
- Convergence of other supportive services like water, sanitation etc.

The services arc extended to the target community at a focal point ‘Anganwadi’ (AWC) located within an easy and convenient reach of the community. AWC is managed by an honorary female worker ‘Anganwadi Worker'(AWW). who is the key community level functionary. She is a specially selected and trained woman from the local community, educated upto high school. She undergoes 3 months training in child development, immunization, personal hygiene, environmental sanitation, breastfeeding. ante-natal care, treatment of minor ailments and recognition of ‘at risk’ children. She gets a small honorarium as an incentive. The presence of AWW in the community has a synergistic effect as she liaises between health functionaries and the community. Convergence with health helps achieve better maternal and child health, enhances awareness regarding family planning services, treatment of morbidity and reduction of mortality. AWC serves as a central point for immunisation, distribution of vitamin A, iron and folic acid tablets and treatment of minor ailments and first aid. AWC is also the venue for health related activities carried out by auxiliary nurse-midwives (ANM). Each AWC looks after a population of approximately 1000 in rural and urban areas and 700 in tribal areas. Presently on an average there is 125–150 AWCs per project/block [4].

Complementary Nutrition

6 months to 6 year old children, pregnant and lactating mothers belonging to low income group families are entitled to avail the facility of CN for 300 days in a year. 300 calories and 8 to 10 g proteins are given to all children below 6 years including those with mild (grade 1 & II) malnutrition while pregnant (3rd trimester) and lactating mothers (first 6 months of lactation) are given 600 calorics and 20 g proteins per day as CN. The type of food varies from state to state. Usually it consists of a hot meal cooked at AWC. It contains a combination of pulses, cereals, oil, vegetables and sugar. Some AWCs provide a 'ready-to-eat' meal while some other agencies like CARE, World Food Programme (WFP) are implementing a 'take-home' strategy for 2–4 weeks at a time for children under 2 years and pregnant and lactating women. While the 'take-home' practice solves the problem of daily attendance and saves considerable time of the AWW, there is bound to be sharing of the food and the index beneficiary at best gets only a part of it. Food sharing strengthens the family bonds though it will delay recovery from malnutrition. Cooking and serving hot meal at AWC, on the other hand, provides a good opportunity to develop a close rapport with the local women and indulge in non-formal education on health and nutrition. This also provides a good opportunity for community mobilisation and participation, though it definitely adds to AWW's workload. A flexible approach to suit the local needs appears to be the answer. Improper storage facilities, poor quality and shortages of CN, erratic food supplies, bad communication, pilferage and other such logistic problems in certain states have been noticed and require corrective administrative measures.

Immunization

AWW helps organise fixed day immunization sessions. Primary Health Care Centre(PHC) and its infrastructure carry out the immunization of infants and expectant mothers as per the national schedule. AWW assists in the exercise; maintains records and follows up the recorded cases to ensure complete coverage. Her services are also being utilised for special drives and campaigns like pulse polio and family planning drive. Such activities, it has been seen, adversely affect her other duties and dilute her commitment to the ICDS programme.

Health Check Up and Referral Services

The health check up activity includes care of all children below 6 years, ante-natal care of pregnant women and post-natal care of lactating mothers. AWW and PHC staff work together and carry out regular check-up, body weight recording, immunization, management of

malnutrition, treatment of diarrhoea, deworming and other minor ailments. At AWC, children, adolescent girls, pregnant women and lactating mothers are examined at regular intervals by the lady health visitor (LHV) and auxiliary nurse-mid-wife (ANM). Malnourished and sick children who Ncannot be managed by the ANW / AWW are provided referral services through ICDS. All such cases are listed by the AWW and referred to the medical officer. Growth Monitoring Promotion (GMP)

It is an important tool to assess the impact of health and nutrition related services. Children below the age of 3 years are weighed once a month and those over 3 to 6 years are weighed every quarter. AWW usually uses the fixed day immunization sessions or 'take-home' ration collection days for growth monitoring activities. Growth is charted to detect growth delay or malnutrition, if any. This activity, unfortunately has not been very successful due to many reasons. Some of which are poor understanding of this activity by the AWW as well as the mother, erratic method of weight taking; non availability of weighing machine/growth charts; lack of knowledge about weight recording and paucity of time at the disposal of AWW. It is to be appreciated that this activity needs a great deal of time, training, supervision and support. Unless these are forthcoming, it becomes just a wasteful time consuming ritual [5, 6]. Nonformal and Preschool Education

Nonformal nutrition and health education given by the AWW is aimed at empowerment of women in the age roup of 15–44 year to enable them to look after their own health and nutrition needs as well as that of their children and families. The education is imparted through participatory sessions at AWC, home visits and small group discussions. Basic health and nutrition messages related to child care, infant feeding practices, utilisation of health series, personal hygiene, environmental sanitation and family planning are usual components covered by AWW.

Early childhood care and preschool education is yet another important activity of ICDS programme. This focuses on the total development of the child upto 6 years. It also promotes early stimulation of younger children (< 3 year) through intervention with mothers. At this tender age, mother is the best teacher. In 1991, school dropout and other adolescent girls in the age group of 11–18 year have also been included in the ICDS orbit for health and nutrition education, literacy, recreation and skill formation. At present this scheme is available in 507 projects only. Preschool education has contributed a great deal in child development. It encourages school enrolment and retention. It also helps ICDS beneficiary

children achieve higher psychosocial development. This was abundantly clear in two separate studies conducted by Central Technical Committee (CTC)-ICDS [7]. In the one carried out by the National Institute of Nutrition (NIN) in 1993 in Andhra Pradesh, Kerala and Tamil Nadu, under supervision of CTC-ICDS, a revealing observation was that higher psychosocial development benefit was more applicable to the younger age group (36–47 months) than the older group (48–72 months). Both the groups, though had far better score than the non-ICDS group. On the basis of this very significant observation, the possibility of introducing an age specific curriculum needs to be explored.

Presently, preschool education in ICDS is aimed at 3–6 year age group. The younger children are educated through their mothers. Non-formal education for mothers is an attempt to improve upon their KAP. It has been argued that as intellectual development gets established by 3 1/2 to 4 years, some sort of direct education could be imparted to 2–3 year old children at AWC. This needs a detailed discussion in view of already over burdened AWW's present commitments and several child psychologists opinion against group teaching at very young and tender age.

Population policy

Population policy refers to control of human population by legislation or other official means. It involves setting goals for such population parameters as total size, the maintenance of demographic stability, and birth and mortality rates.

Concept of a population policy: The size of the population, its characteristics, spatial and rural-urban distribution, rate of growth and its determinants decide the quantum, pattern and distribution of consumption and production. It is, therefore, only natural for the state or the government to be concerned about population. Such concern is most essential for a complex democratic society seeking to eradicate poverty and ensure adequate standards of living for its people. Of course, even an authoritarian leader must consider the actual or potential supply of workers (including army personnel), the requisite equipment and the consumption needs of people.

Therefore, the three determinants of population change – birth rate, death rate and migration to or from a territorial unit – have naturally received explicit or implicit attention from rulers or governments since the days of Kautilya. A policy is defined as a statement of important

goals, accompanied by a specified set of means to achieve them.1 A well-elaborated set of means constitutes a programme.

A good policy has to be based on a sound theory linking the means with the ends, although on social issues it is often likely to involve an element of judgement about the connection between inputs and outcomes or the process. The choice between alternative policies has to be made not just in terms of their prospective contribution to the achievement of goals Thematic Resources (Population/Demography) but also their legitimacy, cost, potential popularity and, among other things, effect on other goals. Given the large number of variables that are influenced by and that influence population trends, there is a temptation to make it into a comprehensive development plan. Population policy could easily be drowned in an elaborate framework. However, a flexible, broad framework is certainly imperative.

Evolution of India's population policy: The major landmarks in the evolution of India's population policy are listed in Annex I. This list can be expanded if one considers the several inevitable shifts in emphasis of the programme over the past 50 years. However, it is important to reflect on the antecedents of the first steps taken by the Planning Commission during 1951-52. Unlike in the case of several other developing countries, the Indian concern about the relatively high level of fertility or the number of children born to Indian women rather than the rate of population growth, reflected a genuine desire to improve the living standards of the people. It was not imposed from abroad. The Indian leadership had been exposed to the development in western countries and did not want India to lag behind. During the 1920s and l930s, some pioneers had set up family planning clinics in Poona and Bangalore. In the 1940s, the Bhore Committee on Health Survey and Development (1946) and the subcommittee on population set up by the National Planning Committee (1940) favoured the involvement of the government in the promotion of family planning. Not surprisingly, therefore, the memorandum submitted by the Family Planning Association of India, set up in 1949 under the presidentship of Lady Dhanvanti Rama Rau, elicited a favourable response from the Planning Commission. The Health Panel, chaired by Health Minister RajkumariAmritKaur, had appointed a subcommittee on population growth and family planning. R.A. Gopalswami, the Census Commissioner in charge of the first census of independent India, was its convener. There were differences of opinion. The health minister insisted that 'no contraceptives should be used'. But Prime Minister Jawaharlal Nehru supported a more flexible approach and also the idea of state action to promote family planning. It was because of the report of this subcommittee that in 1952 India became the

first developing country in the world to adopt a policy of governmental efforts to promote a reduction in the number of children born to Indian couples. Simultaneously, there was considerable effort to initiate varied programmes to lower the level of morbidity and malnutrition and to raise life expectancy at birth from the then low value of around 32 Thematic Resources .

Thus, the early concept of population policy covered both mortality and fertility and did not exclusively focus on fertility. There was also a recognition of the need to improve the quality of life of the people by lowering the burden of disease or morbidity, promoting universal primary education and eradicating illiteracy, exploitation and poverty

Maternal and child health care in India

Maternal and Child Health (MCH) is a program that is delivered through partnerships and builds on other community programs. It is a proactive, preventative and strategic approach to promoting the good health and development of on-reserve pregnant First Nations women and families with infants and young children. The program aims to reach all pregnant women and new parents, with long-term support for those families who require additional services.

A key element of the program is home visiting by nurses and family visitors (experienced mothers in the community), who provide information, support, and linkages to other services; integrating culture into care is a key aspect of the program.

Program objectives include increasing First Nations training opportunities for MCH service providers, increasing participation of on-reserve community members in planning and developing services, increasing coordination of services for on-reserve clients, and developing and/or using existing evaluation tools to measure progress using evidence-based models and approaches.

For the past ten years the provinces and territories have been strengthening their maternal and child health programming because it has such a positive effect on the lives of pregnant women, and families with infants and young children

Major health problems affecting mothers and children in India are:

1. Malnutrition
2. Infection
3. Unregulated fertility

1. Malnutrition

o Malnutrition is widely prevalent in the developing countries

o Pregnant and lactating women and children are particularly vulnerable to malnutrition

o Malnutrition during pregnancy can result in complications like:

• Maternal depletion

• Anaemia

• Post-partum haemorrhage

• Toxaemia of pregnancy

• low birth weight in baby

o Critical periods of life when a child is most vulnerable to malnutrition:

1. Intra-uterine period

♣ Children born with adequate birth weight have lower mortality even under poor environmental conditions

2. Weaning period

♣ Severe malnutrition coincides with the usual age of weaning

o Malnourished children

• Are not only more susceptible to infections

• Severity of illness due to the infection is more among the malnourished children as compared to the well nourished

Hence improving, protection and promotion of the nutritional status, is an essential element of MCH care

Interventions for improving the nutrition of mothers and children are both

• Direct and

• Indirect

• Direct interventions for improving nutritional status are:

¬ Supplementary feeding programs e.g. ICDS, mid-day meal

¬ Food fortification e.g. Iodine, iron fortification of salt, Vitamins A and D fortification of vegetable oils

¬ Iron and folic acid tablet distribution

¬ Nutritional education

• Indirect interventions are those that do not involve direct provision of nutrition but eventually improve the nutritional status:

¬ Control of infections through immunization

1. In general infections deplete nutrition, hence preventing them would improve nutritional status

2. Some infections like measles are known to specifically precipitate PEM, vitamin A deficiency etc. hence measles vaccination would indirectly preserve nutrition by preventing measles

¬ Food hygiene

¬ Provision for clean drinking water

¬ Environmental sanitation

¬ Education

o Education empowers with knowledge about nutrition

2. Infection

• Infections lead to increased morbidity and mortality among both, mother and the baby

The risk of infections is low in developed countries; but they continue to be a major problem in developing countries including India

• Infection during pregnancy can result in

¬ IUGR and low birth weight

¬ Congenital malformations in the foetus e.g. Rubella

¬ abortions

¬ puerperal sepsis

• Cytomegalovirus, herpes and toxoplasma infection are some of the infections seen among pregnant women

• In addition, 25 percent of pregnant women in rural areas have at least one bout of urinary tract infection

• Infection in the child:

1. The risk begins with delivery and then increases

2. Almost a third of the period of infancy may be afflicted by infections in developing countries

• Children are at risk for

1. diarrhoeal diseases,

2. respiratory tract infection and

3. skin infections

4. some regions of the country have increased risk of TB and malaria also

• Frequent infections may precipitate severe PEM and anaemia

• These conditions lead to traditions, taboos which may further aggravate the condition

o Therefore prevention and treatment of infections is a major activity of MCH care

• Infections can be controlled by

1. Immunization- children in developing countries need to be immunized against the major six infections covered under WHO's EPI

♣ TB

♣ Diphtheria

♣ Whooping cough

♣ Tetanus

♣ Measles and

♣ Polio

2. Educating the mothers in management of infections like ORS, danger signs etc.

3. Improving nutritional status reduces both vulnerability and severity of infections

4. Provision of safe drinking water and sanitation

3. Unregulated Fertility (uncontrolled reproduction)

• Unregulated fertility adversely affects the health of both, the mother and the child

• Adverse effects on the mother:

1. Severe anaemia

2. Abortion

3. Antepartum haemorrhage

4. High maternal mortality, the risk increasing significantly after the 4th pregnancy

• Adverse effects on the child:

1. Low birth weight

2. Anaemia

3. High perinatal mortality, the risk increasing greatly after the 4th pregnancy

• Family planning services form an important part of MCH services as it has been shown to have a striking impact on the health of the mother and the child

• Moreover, convenient methods of family planning like new and safer Intrauterine contraceptive devices, oral contraceptive pills, long acting injectable medroxy progesterone acetate, female sterilisation and barrier methods are now available

• The services can be rendered by the peripheral health workers also
• In fact, some countries plan to include family life education at the school level itself

NATIONAL AND INTERNATIONAL ORGANIZATIONS RELATED TO HEALTH

National Association of County and City Health Officials

NACCHO is the national organization representing local public health agencies. NACCHO works to support efforts that protect and improve the health of all people and all communities by promoting national policy, developing resources and programs, seeking health equity and supporting effective local public health practice and systems.

http://www.naccho.org/

American Public Health Association (APHA)

The American Public Health Association (APHA) is the oldest and largest organization of public health professionals in the world. APHA has been influencing policies and setting priorities in public health for over 125 years. Throughout its history it has been in the forefront of numerous efforts to prevent disease and promote health.

http://www.apha.org/

Centers for Disease Control (CDC)

Centers for Disease Control and Prevention (CDC) The Centers for Disease Control and Prevention (CDC) is recognized as the lead federal agency for protecting the health and safety of people – at home and abroad, providing credible information to enhance health decisions, and promoting health through strong partnerships. CDC serves as the national focus for developing and applying disease prevention and control, environmental health, and health promotion and education activities designed to improve the health of the people of the United States.

http://www.cdc.gov/

World Health Organization (WHO)

WHO is the directing and coordinating authority for health within the United Nations system. It is responsible for providing leadership on global health matters, shaping the health research

agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries and monitoring and assessing health trends.

http://www.who.int/about/en/

United States Agency for International Development (USAID)

. Most of the industrialized nations have a similar governmental agency. Political and historical reasons often determine which countries receive donations from bilateral agencies and how much they receive. For example, France concentrates on its former colonies, and Japan gives mostly to developing countries in Asia. In 1994, USAID, through its Center for Population, Health, and Nutrition, donated $1,050 million for long-term health care in developing countries. USAID channels most of this aid through "cooperating agencies" - private international health agencies which contract with USAID.

The World Food Programme (WFP)

supplies food relief in disasters and coordinates the activities of NGOs involved in food relief, as well as assisting them with transportation and logistics. In 1994 it spent $874 million on relief. The WFP also supports agricultural and rural development ($181 million), and education ($131 million).

The International Red Cross and Red Crescent Movement

Is the largest and most prestigious of the world's humanitarian NGOs. It has three components: the International Committee of the Red Cross (ICRC); the International Federation of Red Cross and Red Crescent Societies; the 160 or so individual national Red Cross societies, e.g. the American Red Cross. The seven fundamental principles of the Movement are: humanity; impartiality; neutrality; independence,

UNIT-IV

Maternal and Child Health: Maternal and Child Health – Issues and problems, Gender and Health, definition and importance of IMR & MMR, Antenatal Intranasal and Post-natal care; Breast feeding and its importance; Reproductive Health – Importance of Reproductive health; Family planning & its methods; Sex and Sexuality in terms of HIV/AIDS, LGBT; Sexual Reproductive Health Right.

GENDER AND HEALTH

There are gender-based differences in life expectancy, healthy life years, health behaviours, mortality, and morbidity risks. This is partly due to the socially constructed roles of men and women, and the relationships between them. These norms influence the health conditions individuals are susceptible to, as well as access to and uptake of health services.

When it comes to health, women and men aren't equal

Your biology allows you to escape certain health problems. However, most health conditions affect both men and women in varying degrees and ways.In some cases, doctors don't have a ready explanation for why certain diseases are more common in one sex than in another. In others, doctors will tell you complicated genetic, physiological and hormonal factors are at work. Read on to learn about some of the elements that link sex and health.

Men

Many male health risks can be traced back to behavior: In general, men engage in behaviors that lead to higher rates of injury and disease. They also tend to eat less healthful diets.However, anatomy, hormones and genes also play roles in men's increased risk for these diseases:

Heart disease. Among men age 65 and over, more than 39 percent have heart disease, compared to about 27 percent of women in the same age group.
Why: While women's bodies tend to be pear-shaped, men’s bodies are generally apple-shaped. When women gain weight, it often lands on their hips and thighs.

"Men almost always put weight on around the middle," says Pamela Strauss, MD, an internal medicine physician at Rush. "And we know this type of body fat, known as visceral, is a heart disease risk factor that many women simply don't share."

Also, men don't have the protection of estrogen. Estrogen may keep women's cholesterol levels in check, reducing a key heart disease risk factor. However, once women hit menopause, their heart disease risk goes up.

Parkinson's disease. This disabling neurological disease affects about 50 percent more men than women.
Why: Researchers suggest that this may also have to do with estrogen, which protects neurological function by activating certain proteins or interacting with molecules called free radicals. Men's relative lack of estrogen leaves them with less protection.

Several studies have also pointed to the possibility that Parkinson's disease has a genetic link to the male X chromosome.

Males are also more at risk for the following:

- Autism
- Kidney stones
- Pancreatitis

Women

When you talk with doctors about women's health risks, anatomy and hormones often come up. Here are a few examples:

Stroke. Each year in the U.S., about 55,000 more women have strokes than men.
Why: Many factors play into this statistic, but estrogen is chief among them.

Women may not be aware of the effect estrogen has on stroke risk. They might know that birth control pills, hormone replacement therapy and pregnancy raise risk, but they may not understand the underlying mechanism, which is shifting estrogen levels.

Those changes in levels of estrogen, not the estrogen itself, affect the substances in blood that cause clots. More activity results in more clotting, and that can lead to a higher risk of stroke.

Osteoporosis. Nearly 80 percent of the estimated 10 million Americans who have osteoporosis are female.
Why: Women start out with thinner, smaller bones and less bone tissue than men. Through most of their lives, women's bones are protected by estrogen, which may block a substance that kills bone cells.

However, when women begin to lose estrogen during menopause, it causes loss of bone mass (osteoporosis). This loss takes a toll: Nearly 50 percent of women over 50 will break a bone because of osteoporosis.

Females are also more at risk for the following:

- Migraines
- Alzheimer's disease
- Urinary tract issues
- Multiple sclerosis

DEFENITION AND IMPORTANCE OF IMR

Definition

Infant mortality rate, measure of human infant deaths in a group younger than one year of age. It is an important indicator of the overall physical health of a community. Preserving the lives of newborns has been a long-standing issue in public health, social policy, and humanitarian endeavours. High infant mortality rates are generally indicative of unmet human health needs in sanitation, medical care, nutrition, and education.

Importance

Widely used as a measure of population health and the quality of health care, infant mortality is defined as the death of an infant before their first birthday. Infant mortality represents a long-standing concern of public health. The Federal Children's Bureau, established in 1912, focused on infant mortality as its first initiative, officially recognizing its importance. The infant mortality rate is not only seen as a measure of the risk of infant death but it is used more broadly as a crude indicator of: l Community health status l Poverty and socioeconomic status levels in a community l Availability and quality of health services and medical technology The health and well-being of children and families across the globe are measured by infant mortality rates. Wide acceptance and the relative ease of calculating the annual rate have resulted in the infant mortality rate being commonly used for comparisons across regions, populations and time periods. Such comparisons of infant mortality rates are frequently used in needs assessments and to evaluate the impact of public health programs.

DEFENITION AND IMPORTANCE OF MMR

CDC recommends that people get MMR vaccine to protect against measles, mumps, and rubella. Children should get two doses of MMR vaccine, starting with the first dose at 12 to 15 months of age, and the second dose at 4 through 6 years of age. Teens and adults should also be up to date on their MMR vaccination. Children may also get MMRV vaccine, which protects against measles, mumps, rubella, and varicella (chickenpox). This vaccine is only licensed for use in children who are 12 months through 12 years of age.

Importance

The measles, mumps, and rubella (MMR) vaccine is recommended for all children. It protects against three potentially serious illnesses. It is a two-part vaccination, and in most states, you must prove your children have gotten it before they can enter school. If you are an adult who has not had the vaccination or the diseases, you may need the MMR shot, too.

ANTENATAL CARE/PRENATAL , INTRANATAL CARE AND POST-NATAL CARE

There are three stages of caring for an expecting mother: prenatal, intranatal, postnatal care. This is essential to ensure smooth pregnancy and labour and to keep the mother healthy after

giving birth. This care is a combined effort between the doctor and the expectant couple. Here are a few things to keep in mind if you are expecting an addition to your family.

Prenatal care from the moment you realize that you are pregnant, a woman must start taking extra care of her body. This reduces the risks in your pregnancy and at the time of labour. But even before planning a pregnancy, it is important that couples should consult with the doctor, in order to avoid any complications in future. Thus, you should ensure that regular check up not just during the pregnancy, but also before the pregnancy is equally important, so that your doctor can rule out complications arising due to factors, such as Thalassemia, Thyroid, Blood Sugar and PCOS, etc.

The main objectives of prenatal care are:

- To maintain the health of the mother
- Detect high risk cases
- Foresee complications and find ways to prevent them
- Reduce anxiety associated with delivery

Thus, an important part of prenatal care is to visit your gynaecologist regularly. These visits will be scheduled according to your age and stage of pregnancy. A few other points to keep in mind are:

- Stop smoking and stay away from passive smoking as well
- Stop drinking alcohol
- Avoid contact with toxic chemicals like insecticides etc.
- Ensure your vaccination is up to date

Healthy Snacking Options

- Avoid x-rays
- Do not start or stop any medication without informing your doctor first
- Eat healthy food and drink plenty of water
- Exercise regularly for half an hour daily

- Get plenty of rest
- Avoid stress
- Educate yourself about childbirth

Intranatal care refers to care given to the mother and baby at the time of delivery. The main objectives here are:

- Cleanliness
- Smooth delivery without injuring mother or baby
- Preventing complications
- Delivery resuscitation for the baby

There are a number of ways to deliver a baby and whatever you choose, you must ensure the presence of a doctor at your side, while delivering a baby. Your doctor will determine the position of the fetus and help you through your delivery.

Postnatal care is essential for 6-8 weeks after the baby is born. During this period, the mother goes through a number of physical and emotional changes and thus requires rest, nutrition and vaginal care. The main objectives here are:

- Prevent postpartum complications
- Restore mother to optimal health
- Ensure problem free breastfeeding

Sharing responsibility is essential for the health of the mother, after delivery. Get as much sleep as possible and pay attention to what you eat. Do not try and lose your pregnancy weight instantly. Schedule a checkup with your doctor six weeks after delivery to ensure your vagina has healed properly. Additionally abstain from intercourse at this time. With proper care, every stage of your pregnancy can be a beautiful experience.

BREASTFEEDING

Breastfeeding is the normal way of providing young infants with the nutrients they need for healthy growth and development. Virtually all mothers can breastfeed, provided they have accurate information, and the support of their family, the health care system and society at large.

Colostrum, the yellowish, sticky breast milk produced at the end of pregnancy, is recommended by WHO as the perfect food for the newborn, and feeding should be initiated within the first hour after birth.

Exclusive breastfeeding is recommended up to 6 months of age, with continued breastfeeding along with appropriate complementary foods up to two years of age or beyond.

IMPORTANCE OF BREASTFEEDING

Breastfeeding gives babies the best start for a healthy life and has benefits for the health and wellbeing of mothers and babies. Breastfeeding also has economic benefits for the whole family and society.

Exclusive breastfeeding is recommended until babies are around six months of age, with the introduction of appropriate complementary feeding (foods and drinks other than breastmilk) at this age, in addition to continued breastfeeding to 12 months and beyond, for as long as mother and child desire.

All health workers have a responsibility to encourage, support and promote breastfeeding according to these recommendations. However, health workers should acknowledge that any breastfeeding has benefits for both baby and mother.

Breastfeeding is a normal physiological process. However, for some it is a skill that mothers and babies need to practice, and may need help with. Breastfeeding requires the encouragement and support of partners, families and health carers. Breastfeeding mothers returning to work also need support from their employers.

Breastfeeding will help reduce your baby's risk of:

- obesity
- Type 1 diabetes
- Sudden Infant Death syndrome (SIDS)

- pneumonia and other respiratory infections
- coughs and colds
- gastrointestinal illnesses
- vomiting, diarrhea, constipation
- urinary tract infections
- ear infections that can damage hearing
- meningitis
- childhood cancers, including leukemia and lymphoma
- Chrohn's disease, ulcerative colitis
- Celiac disease
- heart disease and liver disease in adulthood

REPRODUCTIVE HEALTH

Reproductive health refers to the diseases, disorders and conditions that affect the functioning of the male and female reproductive systems during all stages of life. Disorders of reproduction include birth defects, developmental disorders, low birth weight, preterm birth, reduced fertility, impotence, and menstrual disorders.

It is also a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes. Reproductive health implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so.

IMPORTANCE OF REPRODUCTIVE HEALTH

"Adolescents are too often left out of policy planning and service delivery. More focus needs to be placed on providing learning and preparation for the world of work, building healthy lifestyles that reduce noncommunicable diseases and improve sexual health, and protecting adolescents from involvement in violence." Source UNICEF.

Reproductive health is not just about sex. It is part of a holistic health program starting from early age teaching values and understanding the anatomy and physiology of their bodies. This education continues when they are young adults to have safe and acceptable access to

methods of fertility regulation of their choice and the right to have access to appropriate healthcare services that enables women to go safely through pregnancy and childbirth as stated in the WHO definition.

NPH(National Public health) is committed to educate and provide truthful, correct and objective information to our children and teens. In particular, to help them to make right decisions in their lives.

In countries where pregnancy among teens counts for more than 25 percent of all pregnancies and where STDs incidence is growing among adolescents 14-25 years old; NPH has been working with our children either in the school partnering with local public health ministry or by sections in the home.

In 2015, NPHI Medical and Family Services departments started to reinforce a comprehensive curriculum adapted to all ages to aim and continue to provide holistic health education, a vital part for successful and healthy adulthood.

FAMILY PLANNIG AND ITS METHODS

Family planning services are defined as "educational, comprehensive medical or social activities which enable individuals, including minors, to determine freely the number and spacing of their children and to select the means by which this may be achieved".[1] Family planning may involve consideration of the number of children a woman wishes to have, including the choice to have no children, as well as the age at which she wishes to have them. These matters are influenced by external factors such as marital situation, career considerations, financial position, and any disabilities that may affect their ability to have children and raise them. If sexually active, family planning may involve the use of contraception and other techniques to control the timing of reproduction.[2][3]

METHODS OF FAMILY PLANNING

There are different methods of contraception, including:

- long-acting reversible contraception, such as the implant or intra uterine device (IUD)
- hormonal contraception, such the pill or the Depo Provera injection

- barrier methods, such as condoms
- emergency contraception
- fertility awareness
- permanent contraception, such as vasectomy and tubal ligation.

LGBT

The initialism **LGBT** is intended to emphasize a diversity of **sexuality** and gender identity-based cultures. It may be used to refer to anyone who is non-heterosexual or non-cisgender, instead of exclusively to people who are lesbian, **gay**, bisexual, or transgender.

SEXUAL AND REPRODUCTIVE HEALTH AND RIGHTS

Sexual and reproductive health and rights encompass efforts to eliminate preventable maternal and neonatal mortality and morbidity, to ensure quality sexual and reproductive health services, including contraceptive services, and to address sexually transmitted infections (STI) and cervical cancer, violence against women and girls, and sexual and reproductive health needs of adolescents. Universal access to sexual and reproductive health is essential not only to achieve sustainable development but also to ensure that this new framework speaks to the needs and aspirations of people around the world and leads to realisation of their health and human rights.

sexual and reproductive health and rights (SRHR) are essential for sustainable development because of their links to gender equality and women's wellbeing, their impact on maternal, newborn, child, and adolescent health, and their roles in shaping future economic development and environmental sustainability. Yet progress towards fulfilling SRHR for all has been stymied because of weak political commitment, inadequate resources, persistent discrimination against women and girls, and an unwillingness to address issues related to sexuality openly and comprehensively. As a result, almost all of the 4·3 billion people of reproductive age worldwide will have inadequate sexual and reproductive health services over the course of their lives.

To address this unfinished agenda, this 2018 Guttmacher–Lancet Commission proposes a new, comprehensive definition of sexual and reproductive health and rights, an associated essential package of health services, and outlines actions needed beyond the health sector to change social norms, laws, and policies to uphold human rights. Not only are the necessary investments modest and affordable for most low-income and middle-income countries, the benefits of investing in sexual and reproductive health services pay dividends over many years, making it easier to achieve other development goals.

UNIT V

Community Health in India: Community Health Issues related to: Environmental issues with reference to water, air, noise, soil, pollution, radiation hazards; Gender; Education; Housing; Occupational Health Hazards; Disasters; Globalization; Employment; Economy. Food, Nutrition & Health, Concept of balanced diet, Malnutrition, Vitamin and Protein deficiency disorders;Health Education - Definition, Approaches, Models, Contents, Principles and practice of Health Education; Preventive, Curative and Social medicine.Role of Social Worker – Proactive, Preventive, Developmental and Remedial measures in Health

ROLE OF NGOS

NGOs play a pivotal role in the prevention of HIV/AIDS as they work closelywith people who engage in high-risk behavior and it has has funded nearly lots of NGOs,and is striving to create an effective network to enhance awareness and achieve behaviourchange. The aim of NGO collaboration is to educate the vulnerable groups engaging inhigh risk behaviour and to promote safe sex and it encourages area and population-specificintervention programmes by grassroots-level NGOs. The first group comprises NGOs/CBOs who undertake intervention projects. The second group includes organisationsof People Living with HIV/AIDS, with a focus on activities related to care and support,aimed at impact reduction. As part of its policy of transparency, it places advertisementsin newspapers inviting NGO proposals. The selection of NGOs involves three stages:

1) Scrutiny of the proposal by the NGO Advisor and the Technical Advisory Committee.

2) A pre-sanction Field inspection by the Zonal Officer. 3) Approval by the ExecutiveCommittee. All proposals from NGOs are appraised by the NGO Advisor and proposalsrecommended are inspected by Zonal Officers who make field visits to verify the workingof the NGO, their capability and the community's perception of the NGO. After fieldinspection, the proposals along waith the field inspection reports are presentedto the Executive Committee. Based on approval by the Committee, funds are disbursed to the NGOs in instalments after signing the necessary agreement. Intervention programmesare aimed at promoting safe behaviour by providing vulnerable and marginalised groupswith access to condoms, counselling and STD treatment services. Till date, 17 such groupshave been identified and reached through the NGOs. The groups identified for

interventionprogrammes are truck drivers, commercial sex workers, migrant labour, industrial workers,refugees, fishermen, slum dwellers, hotel and lodge workers, domestic help, students, streetchildren and MSMs.It also develops working relationships with NGOs to ensure that the HIV/AIDSsituation is properly and adequately addressed in the appropriate manner.Every year, open-house meetings are conducted with NGOs during whichthe Hon'ble Health Minister interacts with the NGOs. It also conducts sessions whereNGOs can share their experiences and benefit from each other's insights and experiencegained in the field. Training programmes on preparation and management of a projectare held, apart from workshops and seminars for NGOs. Through NGOs, they providesupport for the following activites:

- Counselling
- STD treatment
- Condom promotion
- Treatment for opportunistic infections
- Home care for people living with AIDS
- Networking PLWH/A

Priority Targeted Intervention for Groups at High Risk. The objective of TargetedIntervention Programme is to reduce the rate of transmission among the most vulnerableand marginalized population. One of the ways of controlling the disease from further spreadis to carry out direct intervention programmes among these groups through multi-prongedstrategies, beginning from behaviour change communication, counselling, providing healthcare support, treatment for STD, and creating an enabling environment that will facilitatebehaviour change

Support groups bring together people who are going through or have gone through similar experiences. For example, this common ground might be cancer, chronic medical conditions, addiction, bereavement or caregiving.

A support group provides an opportunity for people to share personal experiences and feelings, coping strategies, or firsthand information about diseases or treatments.

The common experience among members of a support group often means they have similar feelings, worries, everyday problems, treatment decisions or treatment side effects.

Participating in a group provides you with an opportunity to be with people who are likely to have a common purpose and likely to understand one another.

Gender equity means fairness of treatment for women and men, according to their respective needs. This may include equal treatment or treatment that is different, but which is considered equivalent in terms of rights, benefits, obligations, and opportunities.

Human reproductive behaviour is a term used by evolutionary psychologists to refer to the different behaviours that human's exhibit in order to increase their reproductive success.

Sex education helps people gain the information, skills and motivation to make healthy decisions about sex and sexuality.

Comprehensive sexuality education refers to

- Human Development (including reproduction, puberty, sexual orientation, and gender identity)
- Relationships (including families, friendships, romantic relationships and dating)
- Personal Skills (including communication, negotiation, and decision-making)
- Sexual Behavior (including abstinence and sexuality throughout life)
- Sexual Health (including sexually transmitted diseases, contraception, and pregnancy)
- Society and Culture (including gender roles, diversity, and sexuality in the media)

THE SOCIAL STIGMA OF HIV–AIDS: SOCIETY'S ROLE

AIDS is a devastating and deadly disease that affects people worldwide and, like all infections, it comes without warning. Specifically, childbearing women with AIDS face constant psychological difficulties during their gestation period, even though the pregnancy itself may be normal and healthy. These women have to deal with the uncertainties and the stress that usually accompany a pregnancy, and they have to live with the reality of having a life-threatening disease; in addition to that, they also have to deal with discriminating and stigmatizing behaviors from their environment. It is well known that a balanced mental state is a major determining factor to having a normal pregnancy and constitutes the starting point for having a good quality of life. Even though the progress in both technology and medicine is rapid, infected pregnant women seem to be missing this basic requirement. Communities seem unprepared and uneducated to smoothly integrate these people in their societies, letting

the ignorance marginalize and isolate these patients. For all the aforementioned reasons, it is imperative that society and medical professionals respond and provide all the necessary support and advice to HIV-positive child bearers, in an attempt to allay their fears and relieve theirdistress.patients with HIV infection have to deal with, in order to survive and merge into society, identify the main reasons for the low public awareness, discuss the current situation, and provide potential solutions to reducing the stigma among HIV patients.

COMMUNITY HEALTH PROGRAMMES

communities can implement several different program models in order to achieve these goals.Selecting and implementing an HIV/AIDS program model in a rural community involves many important resources and careful planning, community buy-in, and commitment from partners. The most appropriate program model may depend on the rural community's needs, the target population, available resources such as space and transportation, relationships between organizations in the community, HIV/AIDS stigma in the community, and other community characteristics. This toolkit describes fourteen different evidence-based and promising models, some of which have sub-models:

- Models to Prevent New Infections
    - Behavioral Interventions
        - Comprehensive Risk Reduction for Adolescents
    - Prevention with Positives
    - Preventing Transmission through Use of HIV Medications
    - Condom Distribution Programs as Part of a HIV Prevention Strategy
    - Harm Reduction
    - Social Marketing
- Models to Identify HIV/AIDS Cases
    - Routine HIV Testing and Screening in Healthcare Settings
    - Interventions to Identify HIV-Positive People through Provider Referral Partner Notification
    - Community HIV Testing and Screening

- Models to Improve Access to Quality HIV/AIDS Care
    - Telehealth and Use of Technology to Improve Access to Care for People Living with HIV/AIDS
    - Provider Education and Training
- Models to Improve Retention, Adherence, and Self-Management
    - Case Management and Patient Navigation
        - Chronic Disease Self-Management
    - One-Stop Shop HIV/AIDS Programs
    - Medication Management Programs

FAMILY COUNSELING /COUPLE COUNSELING

AIDS (Acquired Immuno Deficiency Syndrome) is caused by multiple sexual contacts, unhygienic blood transfusions and intravenous drug abuse. It is now thought of as a chronic disease whose length is indeterminate and whose course is uncertain. It seems to be an expected diagnosis leading rapidly to death. As the disease is associated with the feelings of isolation and depression in the patients, psychotherapy to the people with this infection and their families is expected to play an important role in the alleviation of psychological symptoms. Family systems therapy leads to intervention of the disease to some extent with the effective counselling of the patient's family. The counselling goals include reconciliation of the ill person and his/ her family, mobilization of family resources, facilitation of ill person's participation in the on-going life and in the planning for its future. The family therapist explains to the AIDS infected person his/her responsibilities towards her/his spouse before death. He also tells howto cope with the grief after the death of loved one. The family counselor also makes his/her best efforts to continue communication with the family members after patient's death and suggests medical check-ups of the family members. Moreover, family systems approach in counseling help in understanding common patterns of couple relationships, empowers the family to believe in its own capacities for problem solution and illness management, maps the family illness structure so as to make it healthier and mobilizes extra familial support to the AIDS patients.

Stigmatization and isolation are major stressors. Bereavement is complicated by fear, shame, dependency and hopelessness. Therefore, a task in counselling is to maintain the integrity and supportiveness of the patient's social unit by encouraging open communications between those involved and by educating about AIDS. Information should be provided on HIV transmission, self-protection, and illness progression as well as the safety of casual contacts and the practices of 'safer sex'. The significant others should retain outside interests and be encouraged to seek help patients from supportive social agencies. Instillation of hope lends benefit to patient, family and friends. Kind, non-judgmental counselling and good quality medical care should be made available, especially since HIV-related disorders are increasingly becoming a chronic disease. Advocacy for the significant others translates into better adjustment and it enhances the patient's medical prognosis.

AWARENESS PROGRAME HIV/AIDS

The aim of the HIV/AIDS Awareness Programme is to empower and increase the awareness to participants of HIV/AIDS, its impact, management and availability of support systems. This is to encourage early testing and lifestyle changes that will thereby reduce and prevent further infection. ... Introduction to HIV and AIDS.

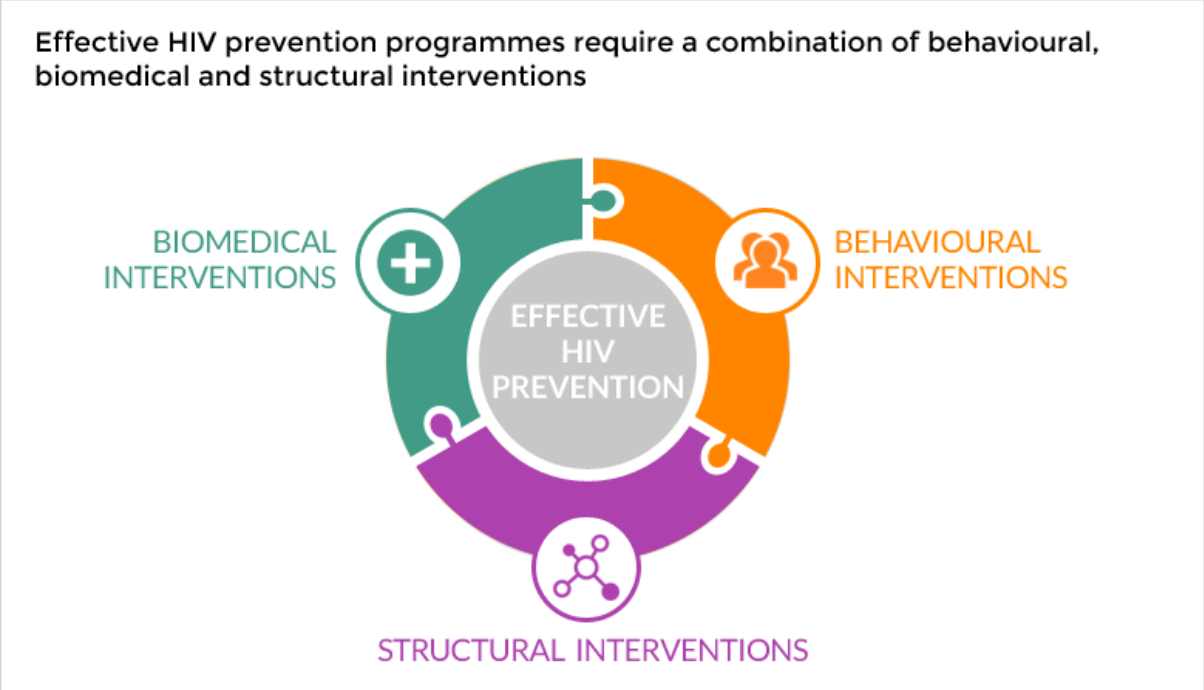
KEY POINTS:

- HIV prevention programmes are interventions that aim to halt the transmission of HIV.
- HIV prevention programmes usually focus on preventing the transmission of HIV through a complementary combination of behavioural, biomedical and structural strategies.
- Despite the progress made by prevention programmes across the globe, the decline in new HIV infections among adults has slowed in the past decade, which indicates the need for increased funding and scale up of services.
- For maximum impact, HIV prevention programmes need to be targeted at high prevalence regions or 'hot spots', and also meet the needs of high-risk groups.

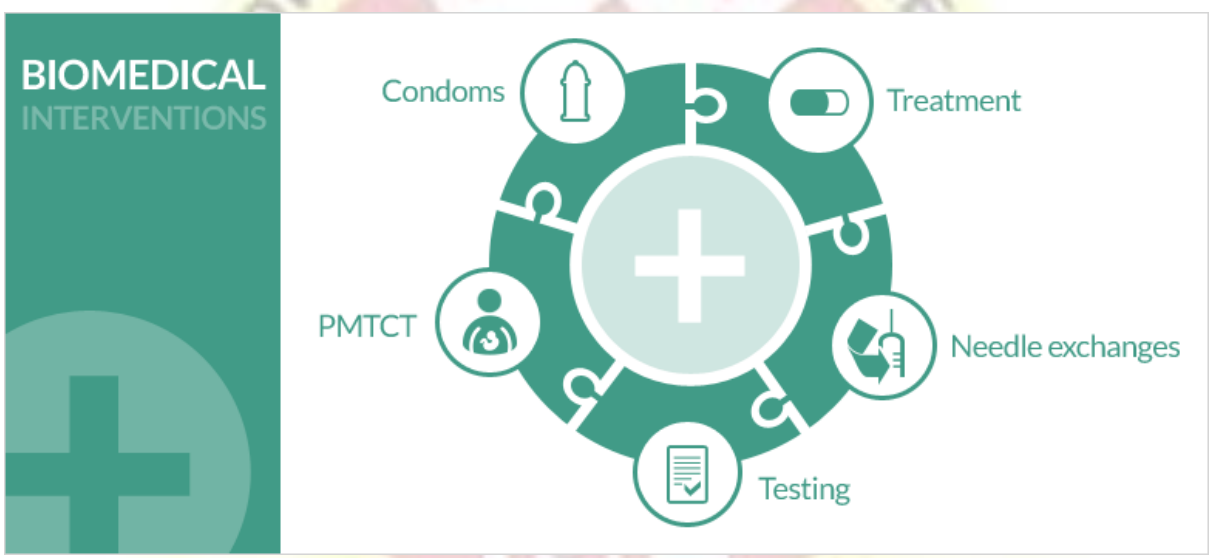
HIV prevention programmes are interventions that aim to halt the transmission of HIV. They are implemented to either protect an individual and their community, or are rolled out as public health policies.

Initially, HIV prevention programmes focused primarily on preventing the sexual transmission of HIV through behaviour change. For a number of years, the ABC approach("Abstinence, Be faithful, Use a Condom")was used in response to the growing epidemic in sub-Saharan Africa.

However, by the mid-2000s, it became evident that effective HIV prevention needs to take into account underlying socio-cultural, economic, political, legal and other contextual factors.1 As the complex nature of the global HIV epidemic has become clear, forms of 'combination prevention' have largely replaced ABC-type approaches.




BEHAVIOURAL
INTERVENTIONS
Sex Education
Programmes to reduce stigma and discrimination
Counselling
Cash transfer programmes


BIOMEDICAL
INTERVENTIONS
Condoms
Treatment
PMTCT
Needle exchanges
Testing


STRUCTURAL
INTERVENTIONS
Interventions to address inequality
Decriminalisation (of sex work, homosexuality, drug use)
Laws protecting the rights of people living with HIV
Increasing access to school education for young girls

BEHAVIOR CHANGE COMMUNICATION (BCC)

Behavior change communication (BCC) is an interactive process with communities (as integrated with an overall program) to develop tailored messages and approaches using a variety of communication channels to develop positive behaviors; promote and sustain individual, community and societal behavior change; and maintain appropriate behaviors. In the context of the AIDS epidemic, BCC is an essential part of a comprehensive program that includes both services (medical, social, psychological and spiritual) and commodities (e.g., condoms, needles and syringes). Before individuals and communities can reduce their level of risk or change their behaviors, they must first understand basic facts about HIV and AIDS, adopt key attitudes, learn a set of skills and be given access to appropriate products and services. They must also perceive their environment as supporting behavior change and the maintenance of safe behaviors, as well as supportive of seeking appropriate treatment for prevention, care and support. In most parts of the world, HIV is primarily a sexually transmitted infection (STI). Development of a supportive environment requires national and community-wide discussion of relationships, sex and sexuality, risk, risk settings, risk behaviors and cultural practices that may increase the likelihood of HIV transmission. A supportive environment is also one that deals, at the national and community levels, with stigma, fear and discrimination, as well as with policy and law. The same issues apply in parts of the world where unsafe injection of illegal drugs is the chief source of new infections. The AIDS epidemic forces societies to confront cultural ideals and practices that can contribute to HIV transmission. Effective BCC is vital to setting the tone for compassionate and responsible interventions. It can also produce insight into the broader socioeconomic impacts of the epidemic and mobilize the political, social and economic responses needed to mount an effective program.

THE ROLE OF BEHAVIOR CHANGE COMMUNICATION

BCC is an integral component of a comprehensive HIV/AIDS prevention, care and support program. It hasa number of different but interrelated roles. Effective BCC can:

- **Increase knowledge.** BCC can ensure that people are given the basic facts about HIV and AIDS in alanguage or visual medium (or any other medium that they can understand and relate to).

- **Stimulate community dialogue.** BCC can encourage community and national discussions on the basicfacts of HIV/AIDS and the underlying factors that contribute to the epidemic, such as risk behaviorsand risk settings, environments and cultural practices related to sex and sexuality, and marginalizedpractices (such as drug use) that create these conditions. It can also stimulate discussion of health care seeking behaviors for prevention, care and support.
- **Promote essential attitude change.** BCC can lead to appropriate attitudinal changes about, forexample, perceived personal risk of HIV infection, belief in the right to and responsibility for safepractices and health supporting services, compassionate and non-judgmental provision of services,greater open-mindedness concerning gender roles and increasing the basic rights of those vulnerable toand affected by HIV and AIDS.
- **Reduce stigma and discrimination**. Communication about HIV prevention and AIDS mitigationshould address stigma and discrimination and attempt to influence social responses to them .
- **Create a demand for information and services**. BCC can spur individuals and communities to demandinformation on HIV/AIDS and appropriate services.
- **Advocate.** BCC can lead policymakers and opinion leaders toward effective approaches to the epidemic.
- **Promote services for prevention, care and support**. BCC can promote services for STIs, intravenousdrug users (IDUs), orphans and vulnerable children (OVCs); voluntary counseling and testing (VCT) formother-to-child transmission (MTCT); support groups for PLHA; clinical care for opportunisticinfections; and social and economic support. BCC is also an integral component of these services.
- **Improve skills and sense of self-efficacy.** BCC programs can focus on teaching or reinforcing newskills and behaviors, such as condom use, negotiating safer sex and safe injecting practices. It cancontribute to development of a sense of confidence in making and acting on decisions.

LIFE SKILLS

In the context of the HIV and AIDS,Life skills-based education is an effective methodology that uses participatory exercises to teach behaviours to young people that help them deal with the challenges and demands of everyday life. the aim of life skills training is to develop

young people's knowledge, and the skills needed for healthy relationships, **effective communication and responsible decision-making, Assertiveness, communication, decision making, critical thinking, managing emotions, self-esteem building, resisting peer-pressure and relationship skills that will protect them and others from HIV infection and optimize their health When implemented effectively,** it can have a positive effect on behaviours.