

# COMMUNITY SYSTEMS STRENGTHENING PROJECT

## Training for Transition (TFT)

Capacity Development for Organisations Working with Vulnerable Groups



Love is a pre-condition for Learning and Development

## Health Training Manual

The banner features several logos and text elements:

- University of Cape Town logo (left)
- Training for Transition (TFT) logo (second from left)
- op place ON FARMS ezifama BUILDING WOMEN'S LEADERSHIP logo (center)
- hambanani logo (third from left)
- European Union flag logo (right)

**Community Systems Strengthening for Health**

Programme funded by the  
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## About Training for Transition

TFT has an overall vision to contribute towards the scale-up and scale-out of **quality service delivery for vulnerable communities**. It provides training, mentoring and we develop training material for organisations that serve the needs of vulnerable communities.

**Goal:** TFT's goal is to create, manage, support and bring to scale a local, integrated model of service delivery to address the needs of under-resourced communities; it includes documentation of processes and sharing lessons learnt. It also aims to influence the development of high quality, need-led training material and effective support systems. The intention is to disseminate shared learning to influence positive practice in under-resourced communities.

As such, TFT has key strategic objectives which include:

- To provide higher level training on Project Planning, Project Management, Financial Management, Monitoring and Evaluation strategies for long-term sustainability and independence.
- To train adults to understand how to meet the developmental and safety needs of children living in under-resourced communities.
- To train adults to support children with life-skills to progress beyond limiting conditions.
- To network with other organisations with similar objectives.
- To mentor identified community-based activists for this training.

### **Mission**

The mission of TFT is to technically assist community-based organisations to access quality training, relevant material, access peer networks, mentoring, coaching and develop systems for information sharing. In the three years of the **community systems strengthening** program, TFT intends to champion the creation, management and coordination of an improved standard of learning, sharing and problem-solving.

TFT uses experienced, independent consultants to provide training and mentoring in their areas of specialty in either gender education, child protection, violence reduction or specific health areas; will ensure program sustainability and continuity of learning, using knowledge on 'Best Practice' in similar conditions; provides ongoing support to scale-up of these services and delivering high-quality interventions.

**Partnership:** In the **Community Systems Strengthening** initiative, the TFT primary partnership is with the **Cape Metro Health Forum** health committee members, **Women on Farms** and **UCT's School of Public Health** and its role is that of a development partner, in the form of technical training, mentoring and content development for four programme areas namely; child protection, peace building, access to food and nutrition and health education broadly.

TFT provides curriculum development, training, documentation of process, dissemination of learning and mentoring within a comprehensive monitoring and evaluation framework. TFT, over the implementation period will continue to focus on developing strong partnerships with government and other service providers – to share material and resource development and to share learning. All TFT products, when complete, will be open-source.



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It can no way be taken to reflect the views of the European Union.



**Open Source Learning Material**

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# Community Systems Strengthening Partnership



A health committee network



Women on Farms Project

**TFT TRAINING CONSULTANCY**



Capacity Development for Organisations Working with Vulnerable Groups.



University of Cape Town, School of Public Health.



## Contents

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## 1. INTRODUCTION

South Africa has committed to addressing non-communicable diseases and at a summit hosted in South Africa in 2011, pledged the following;

*We, the participants in the South African Summit on the Prevention and Control of Non-Communicable diseases gathered in Gauteng from 12-13 September 2011.*

*Recognising that: - Health is a key development goal;*

*Hereby commit to:-*

- ❖ Using the outputs from the summit to develop a full and comprehensive strategic plan.*
- ❖ Create an inter-sectoral stakeholder forum similar to SANAC to implement this strategy.*
- ❖ Fostering patient-centred health care in line with the SA Patients' Rights Charter and incorporating respect, involvement in policy, choice and empowerment, access and support and information.*
- ❖ Working in partnership with all relevant stakeholders including different government departments, non-governmental organizations, user and survivor groups, academics and content experts as well as with private sector stakeholders that commit themselves to reduce Non-communicable Diseases and do not have a conflict of interest, to reduce the incidence and mortality from non-communicable diseases.*
- ❖ Introducing evidence based behavioural interventions and campaigns through the media and other information and education mechanisms to reduce the acquisition and increase health literacy amongst South African consumers to reduce the main modifiable risk factors for non-communicable diseases.*
- ❖ Developing multi-sectoral public policies that create sustainable health promoting environments that enable individuals, families and communities to make healthy choices and lead healthy lives.*
- ❖ Developing and implementing policies, strategies, plans and evidence based guidelines at national, provincial and district levels in and across government departments to prevent and control Non-communicable Diseases through preventive, health promoting, curative, rehabilitative and palliative services.*

### **Community Involvement in Health**

The World Health Organisation (WHO) Constitution enshrines the highest attainable standard of health as a fundamental right of every human being. Access to timely, acceptable, and affordable health care, of appropriate quality, underpins the right to health.

Through health promotion interventions, people can improve their health, take control of it and its determinants by addressing the key social, behavioural and structural determinants of health. The right to health means that governments must generate conditions in which

everyone can be as healthy as possible. Such conditions range from ensuring availability of health services, healthy and safe working conditions, adequate housing and nutritious food.

In the efforts to realise the community participation in health, the National Health Act (NHA 61 of 2003) makes provision for the establishment of health committees at each facility or group of government health facilities. Health committees operating as a community support structure at health facilities can support appropriate planning and provision of health services; improve public accountability; promote dialogue and encourage communities to take greater responsibility for their health. They have important oversight, advocacy and social mobilisation roles.

Health activists can participate in outreach programmes with the health facility staff and can play an important role in mobilising communities to participate in health promotion events.

Through meaningful participation and an advocacy role of health committees, health plans and health facilities may increasingly be held accountable for the quality of the care they provide to their patients to improve adherence and good treatment outcomes. The health system is the main stakeholder that ensures that values and principles are maintained to achieve good health outcomes.

Chronic illnesses include serious and costly diseases which is becoming increasingly common, especially in developing countries, among disadvantaged groups and vulnerable populations. However, there are ways of preventing it and or controlling its progress.

For a country struggling with human right ethos, equitable resources, challenges in reaching universal health coverage, and realisation of the right to health - access to good quality health care is not always guaranteed.

The health training manual seeks to empower a layer of community health activists who are working collaboratively with health committees and health facilities, to increase access to services in neglected communities.

We start off by examining what services exists in under-resourced communities.



## BASELINE ASSESSMENT

**Who:** Name: \_\_\_\_\_

**What:** Name of Organisation: \_\_\_\_\_

**Where:** Place: \_\_\_\_\_

**When:** Date of Assessment: \_\_\_\_\_

### SCORING RESULTS

Baseline	1 Year Assessment
No. of 0s =	No. of 0s =
No. of 1s =	No. of 1s =
No of 2s =	No of 2s =
No of 3s =	No of 3s =
List: Areas of strength	
List: Areas of weakness	
Overall assessment	

## Conducting the Health Baseline

This baseline is used to conduct an external scan of our environment, to establish what is in place.

<b>Services for health management and support for chronic illnesses</b>	<b>No Services Service does not exist (0)</b>	<b>Start - up Service does exist (1)</b>	<b>Intermediary CBO provides comprehensive information on some chronic illnesses. (2)</b>	<b>Ideal CBO provides comprehensive information on all chronic illnesses and supportive services to community members. (3)</b>
<b>Home based care</b>	Services do not exist	Services do exist in pockets but most community members do not access them.	Services exist that all people are aware of and community members access them.	A well-known structure of community home based care activities exist in the community and are linked to the provincial or national department of health.
<b>Health Promotion</b>	Service does not exist	CBOs conduct occasional awareness raising activities.	CBOs offer comprehensive education programmes on some chronic illnesses, e.g. HIV&AIDS, and STIs.	CBOs offer comprehensive training on all chronic illnesses and supportive services to community members.
<b>Hypertension</b>	CBOs aware of the need but no services exist.	CBOs are conducting awareness-raising events on hypertension from time to time.	CBOs meet on a regular basis to discuss training needs to educate community members on some aspects of hypertension.	CBOs are efficiently offering comprehensive training and support to the community on all aspects of hypertension prevention and management.
<b>Diabetes</b>	This service does not exist, but is needed	CBOs conduct occasional awareness raising programmes on some aspects of diabetes.	CBOs have well organised, regular, education sessions on some aspects of diabetes conducted with community members	CBO have a well-established club with comprehensive training programmes and supportive services on all aspects of diabetes
<b>Asthma</b>	No services exist but the CBO is aware of the need.	CBOs are conducting awareness raising sessions on asthma only when they see the need.	CBOs have structured and regular education sessions on some aspects asthma conducted in the community.	CBOs are efficiently conducting training sessions and support services on all aspects of asthma to members of the community
<b>Epilepsy</b>	No service existing, but needed	CBO are conducting awareness raising sessions on TB from time to time	CBO conducts a structured regular education programme on some aspects of TB in the community	CBOs are providing comprehensive efficient training and support activities to community members on all aspects of TB

<b>TB</b>	No service existing, but needed	CBO are conducting awareness raising sessions on TB from time to time.	CBOs conduct structured, regular education programme on some aspects of TB in the community.	CBOs are providing comprehensive, efficient training and support activities to community members on all aspects of TB.
<b>HIV, STDs and Female Reproductive health</b>	Service does not exist	CBOs are conducting occasional awareness raising activities.	CBOs offers comprehensive education programmes on HIV&AIDS, and STIs	CBOs offer comprehensive training on all chronic illnesses and supportive services to community members
<b>Mental Health</b>	CBOs are aware of the need, but no services exist.	CBOs conducting very limited awareness raising sessions on mental health	CBOs have regular structured education session on some aspects of mental health.	CBOs provide efficient and comprehensive training and support services on all aspects of mental health to community members.

### Learning outcomes

1. Participants will have a basic understanding of the chronic illnesses listed in the baseline assessment.
2. Participants will have knowledge of the history or origins of these illnesses.
3. Participants will have some understanding on prevention of chronic illnesses.
4. Participants will learn how these are managed.
5. Participants will reflect on services available in their community.
6. Participants will understand the role of community health activists in providing health support activities.

## 2. CHRONIC ILLNESSES

The World Health Organisation (WHO) Food and Agriculture (FAO) UN Expert Consultation on Diet, Nutrition and the Prevention of Chronic Diseases met in Geneva from 28 January to 1 February 2002 to examine the science-base of the relationship between diet and physical activity patterns, and the major nutrition-related chronic diseases.

Recommendations were made to help prevent death and disability from major **nutrition-related chronic diseases**. These nutrition and physical activity goals should contribute in the development of strategies and national guidelines to reduce the burden of disease. These relate to obesity, diabetes, cardio-vascular disease, several forms of cancer, osteoporosis and dental disease. They are based on the examination of the best available evidence and reviewed the following;

**Obesity:** The imbalance between **declining energy expenditure** due to physical inactivity and high energy in the diet (**excess calories** whether from sugar, starches or fat) is the main determinant of the obesity epidemic.

**Diabetes:** Excess weight gain, overweight and obesity and physical inactivity account for the **escalating rates of type 2 diabetes**, worldwide.

**Cardiovascular diseases:** Cardiovascular diseases, the **major killers worldwide**, are to a great extent due to unbalanced diets and physical inactivity. **Healthy Eating Tip. The humble pumpkin:** Eating pumpkin is good for the heart. The **fiber, potassium, and vitamin C content** in pumpkin all support heart health.

**Cancer:** Tobacco is the number one cause of cancer, but dietary factors contribute significantly to some types of cancer. Maintaining a healthy weight will reduce the risk for cancers of the oesophagus, colorectum, breast, endometrium and kidney. Limiting alcohol intake will reduce risk for cancers of the mouth, throat, oesophagus, liver and breast.

**Osteoporosis and bone fractures:** Fragility fractures are a problem of older people. Adequate intakes of calcium (500 mg per day or more) and of vitamin D in populations with high osteoporosis rates helps to reduce fracture risk, so does sun exposure and physical activity to strengthen bones and muscles.

**Dental disease:** cavities is preventable by limiting the frequency and amount of consumption of sugars and by appropriate exposure to fluoride. Erosion of teeth by dietary acids in beverages or other acidic foods may contribute to tooth destruction. Ensuring an adequate intake of fruit and vegetables should further reduce risk for oral cavity, oesophagus, stomach and colorectal cancer.

## Physical Activity

The crucial role of physical activity as part of nutrition and health was acknowledged. Physical activity is a key determinant of energy expenditure, and thus fundamental to energy balance and weight control.

Physical inactivity is already a major global health risk and is prevalent in both industrialized and developing countries, particularly among the urban poor in crowded mega cities.

**Healthy diets and physical activity are key** for a long and healthy life.

Eating nutrient dense foods and balancing energy intake with the necessary physical activity to maintain a healthy weight is essential at all stages of life.

Unbalanced consumption of foods high in energy (sugar, starch and/or fat) and low in essential nutrients contributes to energy excess, overweight and obesity.

### Activity 1: Developing the Vision

30 minutes

Method: Group Work

- Develop an ideal vision for a healthy neighbourhood (Group)
- Reflect on what currently exists
- What services should be in place?
- What will we eradicate?



*Anything that can be dreamed*

*Can be achieved*

## Theory: Elements to consider when developing a vision

**How we imagine success is critical:** A vision of success is a clear picture of the achievable. The vision should be realistic, based on the context. It should still be aspirational. The vision might need multiple partners to make it achievable. It is seldom the work of only one person.

The vision can focus on changes in and between people, groups and institutions that we can realistically influence.

The organisation is **not** the centre of the universe. The community where the change is being enacted is. It is **one** of the agents of change, acting in concert with each other and influencing the outcomes.

### Activity 2: Reflective Activity

15 minutes

Method: Plenary

Reflect on existing activities. Brainstorm some of the changes that participants want to see in their community. Then think about what will be left behind once the capacity development institution is gone.

What Exists?	What should be Changed?	What do we want to leave in place?

### Activity 3: Writing the epitaph

15 minutes

Method: Individual Work

- Participants can reflect on what they want to achieve in the following way; *“When the intervention is done, what must be written on the tombstone? What essential transformation would have occurred?”*
- Capture in 15 words or less the essential transformation.

Examples:

1. Here lies the first organisation that provided real services to our community.
2. We empowered 1000 young people.
3. We helped 100 chronically ill patients to get the dignity that they deserved.
4. We brought quality health services to our neighbourhood.
5. We educated 120 women in health awareness, 120 young people in HIV education and 120 home based carers.
6. We provided health services to our community.

Once the vision has been clearly defined, the training starts.

### 3. HOME BASED CARE

#### Activity 4: What is home based care?

15 minutes

Method: Buzz Session

With a partner write up the kinds of situation in our community that require home based care and then share in plenary.

- What services currently exist to address this?
- Who does it reach and who should it still reach?

#### Community Home Based Care

Community home based care sprung out of a need to treat patients at home. It pre-supposes that care-givers exist in the community or that a family member is willing and able to provide home based care. It also requires that care-givers have been trained on the basics of chronic illnesses, universal precautions and provision of care.

Community home-based care (CHBC) provides complete quality health services at home to individuals and families, to help restore and maintain health standards and a dignified way of living by providing health support to individuals or families managing chronic illnesses, supported self-care and health education at home.

CHBC offers services to people with;

- Physical impairment
- Medication adherence support and
- Counselling to people with chronic diseases.

Medication adherence support and health promotion prevents unnecessary hospital/clinic visits and admissions by reducing disease complications and deaths caused by chronic illness.

In a table it would look like this;

Category	Sub-category
Provision of care	Basic physical care Palliative care Psycho-social support and counselling
Continuum of care	Accessibility Continuity of care Knowledge of community resources Accessing other forms of community care Community coordination Record-keeping for ill people Case-finding Case management
Education	Health Education programmes Specific health clubs e.g. TB or Diabetes clubs Education to reduce stigma Mass media involvement Evaluation of existing education programmes

Resource Provision	Location of the HBC team Health centre supplies Management, monitoring and record-keeping Home based care kits
Staffing and volunteers	Supervision and coordinating HBC Recruitment Working with the health facility Staff development and incentives Working within national and provincial guidelines
Sustainability	Budget and finance management Technical support Community funding initiatives Encouraging volunteers Pooling resources Out-of-pocket payments Free services
Monitoring and Evaluation	Quality assurance Quality of care – indicators Monitoring and supervision Informal evaluation Formal evaluation flexibility

Basic physical care is the same as basic nursing care. It refers to ensuring basic care and patient comfort. Care-givers should be able to recognize symptoms and refer appropriately, in addition to having some knowledge of symptom management. Basic needs such as food, shelter, comfort, care of bedding and clothing may require identification to ensure that the home is the appropriate place where this care can be provided.



### Defining Palliative Care

Palliative care is the combination of active and compassionate long-term therapies intended to comfort and support individuals and families living with a life-threatening illness. Such care attempts to meet the physical, psychological, spiritual and social needs of ill people and care-givers. It requires a team approach including the ill person, family members, health and welfare workers and community volunteers.



Palliative care emphasizes living, promotes personal choice and helps people to make the most of each day and to maintain a sense of hope. It aims to improve the quality of life by relieving symptoms and enabling people to die in peace, with dignity and in keeping with their wishes.

## Basic Nursing Care

### 1. Universal precautions:

- hand-washing
- clean linen washed with soap and clean water
- ensuring a sterile environment
- using disinfectants and detergents
- safe disposal of rubbish
- avoiding contact with blood or body fluids

### Activity 5: Safety First

30 minutes

Method: Group work

- List some of the most dangerous situations in home-based health provision.
- What are the most contagious chronic illnesses?
- How are these infections spread and what supplies do we need to protect ourselves in each case?

Other aspects of home-based care include;

### 2. Positioning and mobility

- Learning to bathe the patient to prevent bed sores
- Wound cleansing
- Skin care and oral hygiene
- Adequate ventilation
- Assistance with feeding in addition to guidance and support for appropriate nutrition.

### 3. Symptom management includes;

- reducing fever
- relieving pain
- treating diarrhea, vomiting, cough, mouth, throat and genital infections, tiredness and weakness
- neuro-physiological symptoms

### 7. A basic HBC kit should contain;

- Basic medicines for pain and fever and wound treatment
- swabs, bandage, cotton wool
- multi-vitamins
- cleaning equipment, (jik and other cleaning fluids)
- Protective equipment such as gloves or plastic bags and diapers (nappies).

**CHBC services also cover other essential spiritual aspects related to the patient dying.** These include;

1. **Anticipatory guidance:** It is not easy to talk about death and training helps. Some people fear death and open discussion allows an opportunity to talk about these fears. Families might need help with discussing death and making plans for the future including placing children who might be orphaned, creating memory projects and making funeral plans.
2. **Inheritance rights:** Dying without a will often creates some practical problems. Care-givers can help family members make rational rather than emotional or despondency based decisions.
3. **Bereavement Counselling:** Support and counseling to the patient and family is a very important aspect of CHBC. These should be continued for as long as necessary, especially the bereavement issues of children. Important elements of effective communication during this time include sympathy, respect, a non-judgmental attitude, empathy and allowing for dignity to prevail.

**Activity 6: Role Play**

**30 minutes**

Method: Group work

Volunteers choose one of the following scenarios and act out the appropriate response.

1. A family has called your home-based care team to the house. The grandmother is very ill and appears demented. Her daughter and three grandsons aged 8, 14 and 25 are standing around the bed. How do you intervene?
2. You have been visiting a home where a young single mother with Aids, is gravely ill. She lives alone with her 12 year old daughter. She has asked the home based care team to assist with anticipatory guidance. What kind of questions will you ask her and the daughter?

**Definition: Care Giver**

We use the term care-giver in a variety of ways. A care-giver could refer to a grandmother, an aunt, a neighbour, a home-based carer or a person who has taken on the full-time responsibility of a child that has lost a primary care-giver.

**CARE-GIVER:** Primary care-giver who cares for the child.

**COMMUNITY CARE WORKERS:** Responds to a range of family needs e.g. access to grants or food intervention when a family is in crisis. Supports abused children.

**VOLUNTEER:** Offers occasional help to projects in the community e.g. soup kitchen.

**HOME-BASED CARER:** Cares for the ill.

**Vulnerable Children:** The numbers of vulnerable children are growing daily and a home-based carer should identify vulnerable children for referral and support. Vulnerability is based on a

number of reasons which include poverty, drug usage, HIV/AIDS related deaths or abandonment. Added to this is an economic environment that is driving an ever-increasing wedge between the rich and the poor, leaving poor families to slide further down the survival scale.

**Statistics for S.A.: Number of children in child-headed households receiving services from HBC projects, by province.**

<b>South Africa</b>	<b>85 242</b>
Eastern Cape	18 037
Free State	1 760
Gauteng	3 398
KwaZulu-Natal	36 178
Mpumalanga	18 151
Northern Cape	463
Limpopo	2 811
North West	4 247
Western Cape	197

HBC Rapid Appraisal. 2003. National Department of Health

Although more recent statistics are not available, in a question asked to Minister Bathabile Dlamini in parliament in 2013, she responded that there were currently 96 000 child-headed households in S.A that the department was aware of. Health care workers or home based carers should work hand in hand with other community development workers to make sure that they have a reasonable expectation of safety, comfort and dignity.

**Activity 7: Case Study: The Role of Care Workers**

**30 minutes**

Method: Plenary

Read the following article and respond to the questions that follow.

**Mail and Guardian Article: The trials of child-headed families. Glynis Underhill 30 Jan 2015**

*Determined teenager Mpolokeng Mkhwanazi, who raised her siblings, passed matric and now wants to study to be a nurse. (Photo: Madelene Cronje)*

*Mkhwanazi found herself placed in the unenviable role as a teenage head of a household, she became legally entitled to collect the state's social grants for her family. **The Children's Act 38 of 2005 (as amended by the Children's Amendment Act 41 of 2007) and the associated regulations came into force in 2010, making it possible for children over 16, who have assumed the role of family caregiver, to collect the monthly grant.***

*The Act cannot, however, address some of the other challenges facing the young heads of these families, often placing the burden on social services to provide them with assistance. In Mkhwanazi's case, she was still in high school when she began caring for her sisters, 16-year-old Thembi and six-year-old Jane, and her brother, nine-year-old Nkosana.*

*Child and youth careworker Joyce Mohlomi, who is part of the Isibindi project, stepped in to help when she identified the family as needing urgent assistance. Mkhwanazi was battling — she felt overwhelmed with responsibility — and had just failed Grade 11.*

*Mohlomi called a family meeting to mediate the issue of who should collect the family's social grant. Mkhwanazi had elected to let her 30-year-old sister Moipone Nxumalo continue to collect the R2 490 grant each month. The social grant had become a matter of concern because last year Nxumalo had moved to Mpumalanga to find a job,*

a long way from the family in QwaQwa in the Free State. Mohlomi thought it might be preferable for Mkhwanazi to collect the grant, rather than Nxumalo sending food and clothing parcels to the young family. But she accepted the teenager's decision because she did not want to upset the family dynamics.

Nxumalo said she had helped raise her siblings after her mother died six years ago but had been forced to move to Mpumalanga to look for a job. Despite living away from the family, she said she continued to provide financial support, clothing and food for her siblings. While Nxumalo had recently married, she said she planned to return home to look after the young family so that Mkhwanazi could realise her dream of studying to be a nurse in Johannesburg. And this is where the story is nothing short of a miracle: the teenager has just become eligible to go to university. Now 19, Mkhwanazi passed her matric exams last year, through "sheer hard work", according to Mohlomi.

The careworker said another family meeting would be called to discuss how best to manage the current family predicament, because she had met a member of the extended family in QwaQwa who had agreed to look after the children. For Mohlomi, her involvement in the Isibindi project was the realisation of a dream because she helps many children and youth, like Mkhwanazi, who face dire situations. Previously unemployed, she was trained by the government initiative, the Isibindi project, which is run in a partnership between the National Association of Child Care Workers (NACCW) and the national and provincial department of social development."

1. Did the care-worker make the right decision to not intervene?
2. What else could have been done to assist the younger siblings?
3. What would you have done differently?

### **Review the list of Essential Services that care workers can provide**

- Early identification of children and families in need.
- Addressing the needs of child-headed households.
- Ensuring that the basic needs of families, children and sick parents, guardians are met e.g. food, shelter, education and alternative care.
- Linking families and care-givers with poverty alleviation programmes and services in the community.
- Providing families with information to increase their accessibility to grants and other financial support services.
- Providing counseling to address the psychological needs of children and their families.
- Addressing discrimination, stigmatization and disclosures.
- Addressing capacity building needs of families and children.
- Ensuring coordination of the entire programme.
- Assistance with burial costs especially for poor families.
- Addressing the psycho-social and economic needs of families losing a primary care-giver.

### **The consequences of care-giver, home-based care interventions should include;**

1. Improved household food security.
2. Appropriate care and support
3. Receiving material assistance e.g. grants
4. Protection from life-damaging and life-threatening circumstances.
5. Ensuring multi-sectoral support such as; health clinic, schools, social services etc.



Prevent Chronic Fatigue

### **Time-out for Care-givers**

Because of the nature of care-giving work, it has a high burn-out rate. Too much giving to others, without self-care, can lead to chronic fatigue. It is therefore important for care-givers to **develop a regular support group**.

Support groups ensure that;

1. **We have a place to share experiences.**
2. **We are able to communicate our griefs** to others who will understand.
3. **We have a place for therapeutic support** and advice.
4. For most people who take on the responsibility of providing care to someone with serious health issues, it's not a short-term commitment.
5. **Being a caregiver takes a toll** —physically and emotionally and it can create pressures that add to your stress.

### **Types of Support for Care Givers**

**Psycho-educational programs:** Care-giver classes which help care-givers learn skills such as behavior management, depression management, anger management, and personal care techniques.

**Care-giver support groups:** It is very important for care-givers to get together and have debriefing sessions, at least on a monthly basis. These sessions will create opportunities for people facing similar challenges and with similar emotional consequences, to come together and talk through some of the challenges faced. It may be a good idea to develop a roster so that each person gets a chance to speak and the sessions have a rotating facilitator. This encourages personal growth and ensures that all care-givers, both the silent and more talkative ones, have an opportunity to off-load, share information and get feedback.

**Ongoing training** – The more informed we are, the more we are able to develop coping mechanisms. E.g. If we understand that some patients can go into a state of dementia in late stages of AIDS, we can learn to separate ourselves emotionally from some of the painful comments that can be made by patients in a dementia state.

**Organisational Support Structure:** This can be done in a structured manner in a planning session. Planning sessions could cover very important areas such as;

- Developing a care-giver kit.
- Therapeutic intervention.

- Assessing care-givers for work-load and burn-out.
- Ongoing skills development.
- Access to opportunities in the care-giving field.
- Review of financial support.

### Documenting Results (Data collection)

It is important to document results. Here are some of the results that you could document;

- No. of families served.
- No of children accessing the services.
- No. of clients served.
- No. of families/children accessing grants.
- No. of children remaining in school, broken down per gender.

Example of a data collection tool:

1.Home Based Care: Develop services in neighbourhood	
<b>Definition:</b> Complete quality health services at home to individuals and families, to help restore and maintain health standards. The emphasis is on retaining dignity and universal care standards. (Alignment with DoSD & DoH).	
<b>1.1. Number of people served by home based care services disaggregated by gender.</b>	
Male	
Female	
<b>1.2. Number of adults and children attended to by home based care services.</b>	
Male	
Female	
<b>1.3. Number of families receiving home based care services.</b>	
<b>1.4. Number of home based carers trained and service provided.</b>	

In many communities without services the family and community care initiatives are currently carrying the full burden of care. Training is crucial to support a high quality of care. Every citizen has the right to expect to live a life of dignity and a decent lifestyle. Where families are still grappling with poverty, the state provides a minimal social relief package. Home carers should have access to this information in order to assist needy families.

### Social Relief

Social Relief of Distress is a temporary food provision, intended for people in urgent need of support because they are unable to access basic food for their families. Social relief of distress (in the form of a food parcel) is issued monthly for a period of three months. Extensions may be granted in exceptional circumstances.

## Grant Application Processes.

*Information adapted from SASSA website. [www.sassa.gov.za](http://www.sassa.gov.za)*

- SASSA is the organisation that processes grants on behalf of the Department of Social Development.
- All applicants must have a 13 digit bar code ID. (Special circumstances will be considered and should be explained to officials at SASSA).
- Grants will be paid from date of application.
- Apply at the SASSA office nearest to where the applicant lives.
- Application forms must be completed in the presence of a SASSA official.
- When your application is completed you will be given a receipt. (Make sure you have a receipt before leaving).
- It is permitted for family members to apply on behalf of an applicant who is too sick to travel, providing you have all the necessary documentation (See below).
- No money is charged.
- Approval will receive written notification of approval.
- If approval is not granted you have a right to appeal to the Minister for Social Development, in writing. The appeal must be lodged within 90 days of receiving written notification.

### **Activity 8: Review the S.A. Social Security Net 30 minutes**

Method: Group work

Review the different categories and discuss people in your environment that could be assisted with accessing some social relief.

#### **1. Disability Grant**

1. Must be a South African citizen/permanent resident or refugee;
2. Must be a resident in South Africa.
3. Must be 18 to 59 years of age if a female and 18 to 62 years of age if a male.
4. Must submit a medical/ assessment report confirming disability.
5. Medical assessment must not be older than 3 months at date of application.  
and spouse must meet the requirements of the means test.
6. Must not be maintained or cared for in a State Institution.
7. Must not be in receipt of another social grant in respect of him or herself.

#### **2. Child Grants: Foster Child Grant**

1. The applicant and child must be resident in South Africa;
2. Court order indicating foster care status;
3. The foster parent must be a South African citizen, permanent resident or refugee.
4. Child must remain in the care of the foster parent(s)

#### **3. Care Dependency Grant**

1. The application must be South African citizen or permanent resident;
2. The applicant and child must be resident in South Africa;
3. Age of child must be under 18 years;

4. Must submit a medical/assessment report confirming permanent, severe disability;
5. Applicant and spouse must meet the requirements of the means test (except for foster parents); The care-dependent child/children must not be permanently cared for in a State Institution; *Note: The income of foster parents will not be taken into consideration.*

#### **4. Grant-in-aid**

1. The applicant must be in receipt of a grant for Older Persons
2. Disability grant or a War Veteran's grant, and require full- time attendance by another person owing to his/her physical or mental disabilities
3. Must not be cared for in an institution that receives subsidy from the State for the care/housing of such beneficiary

#### **5. Old Age Grant**

1. Must be a S.A. citizen.
2. Must be resident in S.A. at time of application.
3. Male must be 65 years old.
4. Female must be 60 years old.
5. Spouse must comply with means test.
6. Must not be cared for in a State institution.
7. Must not be in receipt of another social grant.
8. Must submit a 13 bar digit identity document.

#### **Proof of Identity**

*Applicants who do not have 13 digit bar coded Identity Book, or birth certificate for children involved in the application can still apply for a grant. Please obtain information from your nearest SASSA office on the alternative documents which are accepted for grant applications.*

**Methods of Payment:** You can receive your grant by the following methods: • Cash payments • Banks • Institutions. *Note: If you are unable to collect the grant yourself you may nominate a procurator to collect it on your behalf.*

#### **Grant Amounts as at 01 April 2017**

Grant Type	Amount Payable 2009	Amount Payable – 1 <sup>st</sup> April 2017
Old age	R940.00	R1 620.00
Disability	R940.00	R1 620.00
Grant-in-aid	R210.00	R380.00
Child Support Grant	R210.00	R380.00
Foster Care Grant	R650.00	R920.00
Care-dependency grant	R940.00	R1 620.00



Contact details for Cape Town.

**Local offices:**

Office	Address	Postal Address	Tel:	Fax:
<b>Athlone</b>	Melofin Centre, Klipfontein Road. Athlone	Private Bag X11, Athlone. 7760	021 696 8038/9	021 696 8072
<b>Bellville</b>	Omnia Building, 107 Voortrekker Rd. Bellville	Private Bag X50, Bellville. 7535	021 940 7100	021 948 3024
<b>Gugulethu</b>	C/o Bishops Court & Fezeka, Gugulethu. 7760	Private Bag X11 Athlone. 7760	021 638 5151	021 638 5117
<b>Khayelitsha</b>	Julius Tsholo Street, next to Khayelitsha station.	Private Bag X001, Khayelitsha. 7783	021 360 2100	021 364 1337
<b>Mitchell's Plain</b>	45 Alpha Street, Wespoort Park, MP Industrial Area	Private Bag X10, Mitchell's Plain	021 370 4800 or 4872	021 376 1342
<b>Wynberg</b>	Cnr Maynard & Station Rd, Wynberg	P Bag X25, Wynberg. 7824	021 710 9800	021 710 9800
<b>Cape Town (Head office)</b>	48 Queen Victoria Street, CT.	PO Box 131. CT. 8000	021 – 481 9736	021 423 8331

**Criteria:**

- The applicant is awaiting permanent aid.
- The applicant is declared medically unfit to work for a period of less than 6 months.
- The breadwinner is deceased and insufficient funds are available.
- The applicant has been affected by a disaster, but it has not been declared a disaster area or
- The applicant has appealed against the suspension of his or her grant.
- The person is not a member of a household that is already receiving social assistance.
- The person is not receiving assistance from any other organisation.

**Means Test**

SASSA uses a means test to evaluate the income and assets of the person applying for social assistance. This test is the method used to determine whether a person qualifies to receive a grant. The means test varies from one grant to another.

**WHO PROVIDES HOME COMMUNITY-BASED CARE?**

HCBC services in the Western Cape are provided by non-profit organisations (NPOs), which are tendered for and subsidized by the provincial government.

Patients who need ongoing care at home upon discharge from hospital are referred to a health facility at primary health-care level, in the area in which they live.

The dedicated Home Community-Based Services Coordinator at the clinic or primary healthcare centre refers the patient to the NPO partner responsible for HCBC services in the area. The NPO co-coordinator who is a nursing sister will assess the needs of the individual in their home and develop a care plan for them. The sister then assigns a community care worker (CCW) to the individual.

The care worker will render the service according to the instruction on the care plan and the sister will visit the individual to make sure that the plan is being carried through.

HCBC is not a 24-hour service and does not replace the family as the primary caregiver. It is only meant to be a complementary and supportive service to prevent "burn-out" for family caregivers who are forced to care for sick relatives.

Clients needing community adherence support are, after having been educated on their health conditions, referred by the health facilities to Community Based Services for ongoing community support.

The Community Care workers also do health education to the households in the homes that they visit.

**TRAINING FOR COMMUNITY CARE WORKERS:** Community care workers who work for the NPOs funded by the Health Department, have to complete a South African Qualifications Authority (SAQA) accredited Ancillary Health Care Qualification to ensure that they render a quality service to the communities and this is facilitated and funded by the Department of Health. Continuous, in-service training is provided by the Department of Health to ensure competence. This service has not been implemented in all areas. The priority has been the uninsured population.

Contact the District HCBC programme coordinators for information regarding the areas where it is available. The **provincial contact** details are as follows;

**9 Wale Street, Cape Town, 8001**

7:30am – 4pm weekdays

8am – 12pm Saturdays

**Call us on 0860 142 142:**

**Email:** [service@westerncape.gov.za](mailto:service@westerncape.gov.za) **SMS:** Send 'Help' to 31022

**Please Call Me:** 079 769 1207 **Fax:** 021 483 7216

Information taken from the Department of Social Development online site.

## 4. HEALTH PROMOTION

**Prevention of Chronic Illnesses:** Prevention of disease starts in the womb. Pregnant women particularly, should eat a well-balanced diet and any additional vitamins such as iron and folic acids that is needed for the foetus to develop with sufficient nutrients. Health promotion and prevention work is equally important to the management of chronic illnesses, to reduce the prevalence of a high burden of disease in the community and at the health care facilities. There are a range of health promotion areas to be aware of;

### Activity 1: Understanding Health Promotion

45 minutes

Method: Buzz Session

With a partner reflect on your environment and list the kinds of diseases or illnesses in your community that could have been prevented. In another column write up how this can be done.

- What services currently exist to address this?
- Who does it reach and who should it still reach?
- Read the requirements for a balanced diet and reflect on which essential elements your body might be lacking.
- What is missing

### Diet Related Diseases

As people grow older, they have a greater chance of developing certain **diet-related diseases**, such as hypertension (high blood pressure), heart **disease**, cancer, and/or osteoporosis.

In order to live healthily, we need a certain amount of information about vitamins and minerals. Also, we have the right to live in safety and in a stress free environment. Diet plays a crucial role physical fitness and a stress-free environment in wellness. Here follows some basic information on the range of foods that your body needs;

**Proteins** are large molecules that our cells need to function properly. They consist of amino acids. The structure and function of our bodies depend on **proteins**, and the regulation of the body's cells, tissues, and organs cannot exist without them. Our bodies need protein for the formation and repair of cells, tissue, skin, bones and muscles. **Proteins** are found in food such as **beans, soya, cheese, lentils, eggs, peas, meat** and **fish**. The body needs daily intake of protein.

**Carbohydrates** are the body's main fuel. Avoid fast-releasing carbohydrates such as sugar, sweets and refined foods. Slow releasing carbohydrates should make up approximately two-thirds of your diet. Foods with a high content of slow-releasing carbohydrates include **dark-green, leafy vegetables, fresh fruit, lentils, peas, beans** and **seeds**.

**Fibre** absorbs water making it possible for food to pass through the body more easily. This helps to prevent constipation and slows down the absorption of sugar into the blood, helping to maintain good energy levels. 35 grams of fibre is recommended daily. **Brown rice, barley, oats, lentils, beans, fruit and vegetables** such as **cabbage** are high in fibre.

## Vitamins

**Vitamins A, B, C, D and E and Minerals** such as **selenium, iron, zinc, manganese, chromium, and magnesium** are needed on a daily basis to avoid any type of **deficiency**. For example a **lack of magnesium** is associated with cardiovascular disease, so eat plenty of green vegetables, nuts and seeds.

**Green foods** are also needed for nerves, muscles and hormones. Selenium has protective properties against cancer and premature ageing. We are talking about **nuts, seafood, seaweed** and **sesame seeds**. Red foods too have health benefits e.g. It is said that a **tomato** per day assists with preventing the formation of cancer causing nitrosamines. As for the vitamins, we all know how important they are.

**Vitamin A** is rich in antioxidants, which fights free radicals keeping you younger for longer.



The **B-complex** group is essential particularly as we age.



**Vitamin B1** - for depression and energy and poor appetite

**B3** - for insomnia, hallucinations and some psychiatric conditions

**B5** - extreme exhaustion

**B6** - premenstrual tension

**B9** – folic acid for nervous tension and pregnant women

**B12**- nervous system

In fairly healthy people a B-complex which covers the whole group is recommended. Normally people over the age of 45 require a regular B boost to support the nervous system.

**Vitamin C** is excellent for the immune system and should be taken regularly to prevent colds and flu. Vitamin C helps absorb iron into the blood stream.



**Vitamin D** is essential for skin, eyes and hair.



**Vitamin E** is good for the skin, anti-ageing and prevents disease.



No one vitamin can be separated from the others. We need a balanced amount of all the vitamins to retain a vital and healthy lifestyle.

### Minerals

Minerals include **calcium, iron, potassium, magnesium, phosphates** and all these elements are found in our soil and as a result in the animals that live off its products such as fish, and minerals are found in the foods that come from our soil.

**Essential fats** are associated with brain function and memory and lessen the risk of cancer and heart disease. **Fish** (tuna, salmon, and mackerel) is the best source of essential fatty acids as they contain the much needed **Omega 3** oils. At least three servings of fish per week are recommended and an Omega 3 supplement will be beneficial to those who suffer from memory and concentration problems.

**Anti-oxidants** prevent premature ageing and fights disease. **Sweet potatoes, carrots, watercress, peas** and **broccoli** are good sources for increasing your antioxidant intake. To maintain sufficient antioxidants, do not fry foods. Frying food in oil produces free radicals, highly reactive chemicals that destroy essential fats in food and damage cells. Boost your immune system by eating food rich in anti-oxidants

such as fish and meat containing **vitamin A**, **vitamin C** (citrus fruits and berries) in abundance, **vitamin E** found in seeds and **beta-carotene** in carrots - **red**, **orange** and **yellow** fruit and vegetables. Their presence in your diet will increase your longevity and prevent disease.

Extract from 'C'mon, Heal Yourself'. Anita Marshall

### Activity 2: Essential Food for Healthy Development

45 minutes

Method: Buzz Session

With a partner discuss: Our source of protein is found mainly in meat, fish and chicken. Do we need all the meat that we eat? Discuss other sources of protein.



### Water, water, water

Clean drinking water should be available throughout the day. Eight glasses per day is recommended.

In addition to clean, drinking water, a range of healthy foods should be accessed on a regular basis for people recovering from illness.

- ❖ fruit
- ❖ Beans, peas, lentils and green, leafy vegetables
- ❖ carbohydrates for energy
- ❖ Protein such as fish or chicken

### Activity 3: Health Promotion Plan

15 minutes

Method: Group Work

Write up a list of things that support health promotion and then develop a list of target audiences for this information e.g. a healthy diet for pregnant women could be shared at the clinic on the days for maternal and child health.

- What services currently exist to address this?
- Who does it reach and who should it still reach?

### What are lifestyle illnesses?

It is generally known that many of the leading causes of death and disability in the world can be prevented. Health risk behaviour that causes chronic illnesses are unhealthy behaviours that one can change. Four of these health risk behaviours—lack of exercise or physical activity, poor nutrition, tobacco use, and drinking too much alcohol—cause much of the illness, suffering, and early death related to chronic diseases and conditions.

While health professionals play an important role in health promotion at health facilities and in communities, the role of community based health educators cannot be underestimated. Through the involvement of all individuals, communities and all organisations in health promotion activities, progression of disease can be stopped in its earliest stages. Promoting a healthier lifestyle, access to information, treatment of the causes of illness, early detection through health screening and counselling, and capacity development can reduce death and disability.

#### Activity 4: Lifestyle illnesses

15 minutes

Method: Plenary

- Participants generate other lifestyle illnesses related to their environment.

### What is a chronic condition?

**Chronic diseases** are long-term medical **conditions** that are generally progressive. Some examples of **chronic diseases** include heart **disease**, diabetes, stroke, and **chronic** respiratory problems.

### Role of Stress

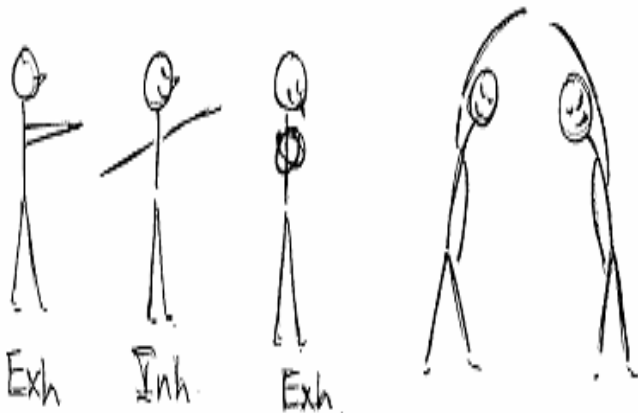
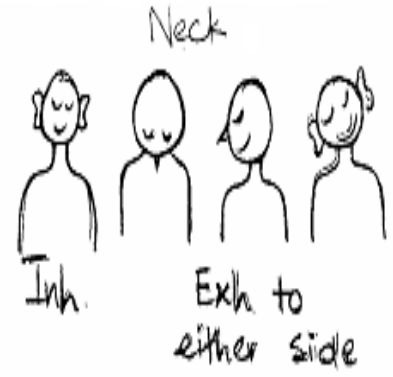
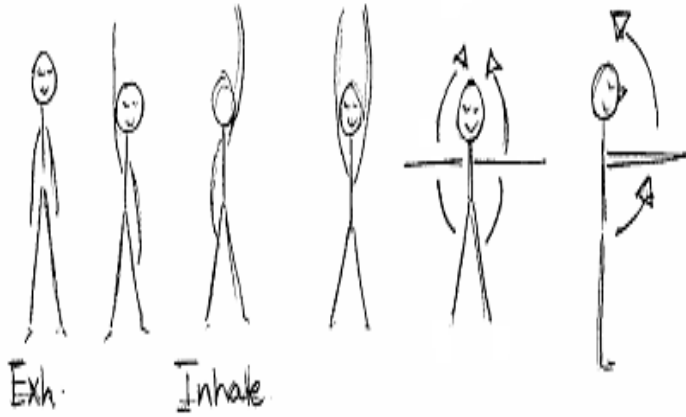
Stress plays a significant role in the development of chronic illnesses such as hypertension. Meditation and thoughtful breathing exercises can be used to assist people to find relief from anxiety, especially in neighbourhoods plagued by poverty and violence. Stretching and breathing exercises can assist with relieving daily stresses.

#### Activity 5: Physical Activity

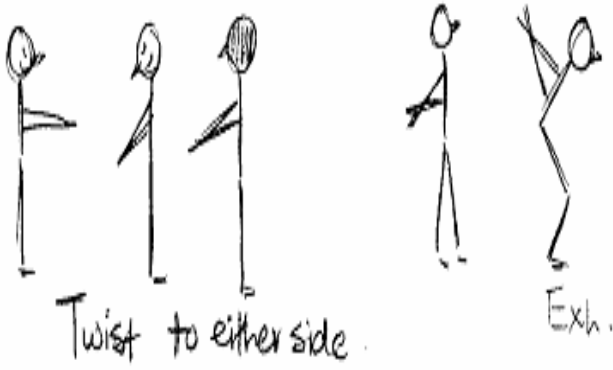
15 minutes

Method: Plenary

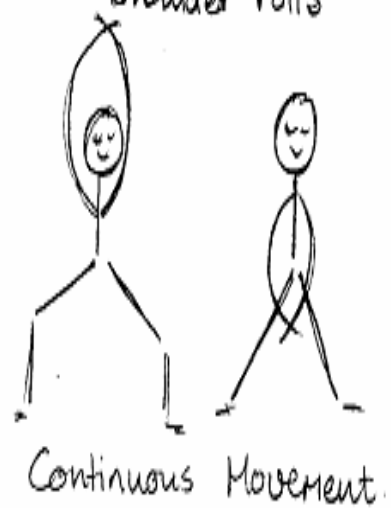
- Each participant has to come up with one physical exercise that they can start doing.
- Participants carry out the following stretching exercises



Shoulder rotations.



Shoulder rolls



Continuous Movement.



## 5. HYPERTENSION

### Hypertension in S.A.

International Journal of Epidemiology on Tue, 04 Feb 2014 released that South Africa has the highest rate of high blood pressure in the world. A major concern in this study is that less than one in 10 people were effectively controlling their condition with medication.

Heart and stroke Foundation emphasise that *'Achieving a long and healthy life, free from disease, is a right not just for South Africans but for everybody in the world'*. In accordance with Heart and Stroke Foundation, statistics show that about 130 heart attacks and 240 strokes occur daily in South Africa. Research highly recommends urgent strengthening of public health education and blood pressure-monitoring systems to better manage hypertension among older adults in South Africa as critical.

### What is Hypertension?

Hypertension is the health condition in which the amount of force exerted against the walls of the arteries as the blood flows through them is very high. If a person has hypertension, it means that the walls of the arteries are receiving too much pressure repeatedly.

### What is High Blood pressure?

Blood pressure is shown as two numbers, such as 120/80 (say "120 over 80"). The top number is the pressure when the heart pumps blood. It is called the **systolic pressure**. The bottom number is the pressure when the heart relaxes and fills with blood. It is called the **diastolic pressure**. Anyone whose blood pressure level is 140/90 or more for a sustained period is said to have high blood pressure, or hypertension.

### Ideal Blood pressure

An ideal blood pressure for an adult is less than 120/80. High blood pressure is 140/90 or higher.

People who are diagnosed with high blood pressure should have their blood pressure checked frequently.

### Causes of high blood pressure

When referring to the causes of high blood pressure, two categories are identified:

#### 1. Primary hypertension (Essential hypertension)

Essential hypertension (also known as primary hypertension) is the most common and complex type of hypertension. It is found in more than 90 % of the hypertensive population. By definition it has no direct causes, although most experts suspect a variety of factors. This type of hypertension is diagnosed after your doctor notices that your blood pressure is high on three or more visits and has eliminated all other causes of hypertension. This condition tends to develop gradually over many years. While an explanation might be possible, no underlying

disease, condition, or disorder causes the high blood pressure to occur. It is sometimes thought to be hereditary.

### **Signs and symptoms.**

Usually people with essential hypertension have no symptoms, but they may experience frequent:

- Headaches
- Tiredness
- Dizziness or
- Nose bleeds

Some causes could be:

- Stress
- Salt
- Obesity
- Smoking & chronic alcohol consumption
- Diet
- Diabetes
- Insufficient intake of potassium, calcium, and magnesium;
- Lack of physical activity; and
- Heredity

### **Treatment:**

- Monitoring and adjust your diet
- If you are obese, lose weight
- Reducing your salt intake
- Adopt a regular fitness routine - exercising, and
- Stress reduction activities such as cycling, meditation, breathing exercises.

If these lifestyle modifications are unsuccessful, then you may need to start taking medication on a daily basis to keep your symptoms under control. The majority of all people with high blood pressure are "salt sensitive," meaning that anything more than the minimal bodily need for salt is too much for them and increases their blood pressure.

## **2. Secondary Hypertension**

The most common cause of secondary hypertension is an abnormality in the arteries supplying blood to the kidneys.

### **Other causes include:**

- Airway obstruction during sleep
- Diseases
- Tumours of the adrenal glands
- Hormone abnormalities
- Thyroid disease

- Pregnancy
- Too much salt or alcohol in the diet
- Certain defects in blood vessels you're born with (congenital)
- Illegal drugs, such as cocaine and amphetamines
- Medications that constrict blood vessels

**Over-the-counter medications (drugs) including:**

- Ibuprofen (Motrin, Advil, and others)
- Pseudoephedrine (Afrin, Sudafed, and others)

**Certain medications that can cause hypertension are:**

- Birth control pills - specifically those containing oestrogen
- Cold remedies
- Decongestants

**TREATMENT**

No matter what medications your doctor prescribes to treat your high blood pressure, you'll need to make lifestyle changes to lower your blood pressure.

**MANAGEMENT**

**Two pieces of good news!**

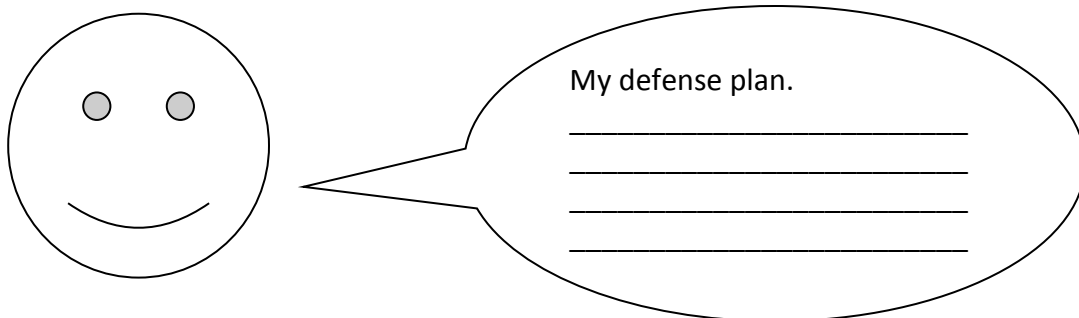
1. You can prevent hypertension
2. If you already have it, you can manage it

**Get Tested: Know your enemy**

Your doctor may recommend routine tests, such as:

- A urine test (urinalysis),
- Blood tests,
- A cholesterol test and
- An electrocardiogram — a test that measures your heart's electrical activity.

You can't manage what you don't know, so the first step is to get regular health check-ups. Let your doctor or the nurse take your blood pressure reading. Also, talk to your family; find out whether your parents, uncles or aunts suffer from hypertension. And then, if you don't have hypertension, how do you protect yourself against this villain? Come up with your own plan:



### Some Defence Tips!

- Aim for a healthy weight. This is not under or over-weight.
- Follow a healthy eating plan: go for fresh foods, lose the sugar and increase your fibre.
- Eat less salt. Don't add extra salt to your plate and take care with salty sauces
- Exercise regularly. Make this fun and do it often – even a brisk 20-minute walk every day is a start!
- Manage your stress levels (this is important!)
- Stop smoking, and don't get stuck in a new trap with alternative tobacco products.

**Manage stress:** Reduce stress as much as possible. Practice healthy coping techniques, such as muscle relaxation, deep breathing or meditation. Getting regular physical activity and plenty of sleep can help, too. Move away from a stressful environment if you are able to.

- **Maintain a healthy weight** - lose weight if you're overweight or obese, this can help you control your high blood pressure and lower your risk of related health problems.
- **Increase physical activity** - Regular physical activity can help lower your blood pressure, manage stress, reduce your risk of several health problems and keep your weight under control.
- **Limit alcohol** - Even if you're healthy, alcohol can raise your blood pressure. If you choose to drink alcohol, do so in moderation.
- **Don't smoke** - Tobacco injures blood vessel walls and speeds up the process of hardening of the arteries. If you smoke, ask your doctor to help you quit.
- **Monitor your blood pressure at home** - Home blood pressure monitoring can help you keep closer tabs on your blood pressure, show if medication is working, and even alert you and your doctor to potential complications. Home blood pressure monitoring isn't a substitute for visits to your doctor, and home blood pressure monitors may have some limitations. Even if you get normal readings, don't stop or change your medications or alter your diet without talking to your doctor first. If your blood pressure is under control, you may be able to make fewer visits to your doctor if you monitor your blood pressure at home.
- **Practice relaxation or slow, deep breathing.** – deep, slow breaths to help relax.
- **Control blood pressure during pregnancy** - If you're a woman with high blood pressure, discuss with your doctor how to control your blood pressure during pregnancy.
- **Decrease the salt in your diet** - A lower sodium level — (1,500 milligrams (mg)) 5ml a day — is appropriate for people 51 years of age or older. Reduce the amount of salt you eat by paying attention to the amount of salt that's in the processed foods you eat, such as canned soups or frozen dinners.

**Did you know?** The number one RISK for salt content both locally and internationally is bread.

### Activity 3: Eating Monitor

15 minutes

Method: Plenary

- Identify hot spots for bad eating.

### Healthy Eating Tip: The humble pumpkin

Consuming adequate **potassium** is almost as important as decreasing sodium (salt) intake for the treatment of hypertension (high-blood pressure). Pumpkin has lots of potassium.

## What is prehypertension?

Pre-hypertension is blood pressure that is higher than normal but not high enough to be high blood pressure. It is a warning that your blood pressure is going up. Prehypertension is between 120/80 and 140/90.

**Risks associated with prehypertension:** Prevention and management are the same as for hypertension.

- Stress and anxiety
- High cholesterol
- Obesity
- Diabetes - are seen more in people with prehypertension than in those with normal blood pressure.

**Newborns and very young babies can also get high blood pressure;** they may experience the following signs and symptoms:

- ❖ Failure to thrive
- ❖ Seizure
- ❖ Irritability
- ❖ Lethargy –(tiredness, dullness)
- ❖ Respiratory distress

## CASE STUDY

**'My diet and lack of exercise contributed greatly to my stroke', commented Dave:** *I liked to eat a lot of salt with his food. Whatever I ate, whether it was a takeaway or fish and chips, I would always add plenty of seasoning. I didn't exercise and was overweight. In December 2003, I collapsed on someone's doorstep during a delivery. I had a feeling like vertigo and I felt dizzy. I knocked on the door and I told the person who answered that I was feeling unwell. I collapsed moments later. I had lost the use of my right side and my speech was slurred. Hospital tests confirmed I had had a stroke caused by a blood clot.*

*I was in hospital for a week, where I was given physiotherapy and speech therapy. I took medication to control my blood pressure and cholesterol. I was home for Christmas Eve, I was walking again by then, but it took me three months to regain the use of my hand and arm. My speech and my ability to swallow came back within 24 hours. However, even now I struggle with tying shoelaces and using keys.*

*My family were crucial in my recovery. They helped with my determination to get better. My mother walked with me every day. Having a stroke at 40 was a big shock for me. I thought strokes didn't happen to people my age. It took me a long time to come to terms with my stroke. I still suffer bouts of anxiety and depression. The stroke has left few traces, but it's less obvious effects include moments of extreme tiredness. It's a hidden disability that's hard to explain. It's a fatigue I've never experienced before, and it's quite debilitating. I lost my business soon after the stroke, but was keen to get back to work as soon as possible to rebuild my self-esteem.*

## CONSEQUENCES

**Heart attack or stroke:** High blood pressure can cause hardening and thickening of the arteries (atherosclerosis), which can lead to a heart attack, stroke or other complications.

**Aneurysm:** Increased blood pressure can cause your blood vessels to weaken and bulge, forming an aneurysm. If an aneurysm ruptures, it can be life-threatening.

**Heart failure:** To pump blood against the higher pressure in your vessels, your heart muscle thickens. Eventually, the thickened muscle may have a hard time pumping enough blood to meet your body's needs, which can lead to heart failure. Weakened and narrowed blood vessels in your kidneys. This can prevent these organs from functioning normally.

**Vision Loss:** Thickened, narrowed or torn blood vessels in the eyes. This can result in vision loss.

**Metabolic syndrome:** This syndrome is a cluster of disorders of your body's metabolism, including increased waist circumference; These conditions make you more likely to develop diabetes, heart disease and stroke.

**Trouble with memory or understanding:** Uncontrolled high blood pressure may also affect your ability to think, remember and learn. Trouble with memory or understanding concepts is more common in people with high blood pressure.

**Hypertension damages the walls of the arteries:** If you have high blood pressure, the force exerted on your arteries is too high. It's so high that it creates microscopic tears in the artery walls that then turn into scar tissue.

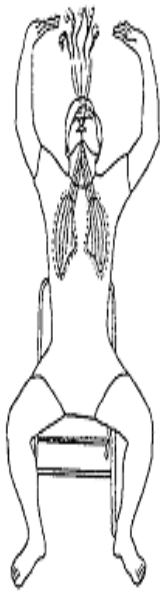
- **Damaged arteries accumulate circulating materials such as cholesterol, platelets, fats and plaque builds up.**
- This scar tissue provides a lodging place for particles of fat, cholesterol and other substances, which are collectively called plaque. As the plaque builds up, the arteries slowly narrow and harden.
- **Hypertension speeds up hardening of the arteries.**  
As you age, your arteries will naturally harden and become less elastic over time. This happens even in people without hypertension. However, uncontrolled high blood pressure speeds up the hardening process.

#### **Activity 4: Hypertension Awareness**

**1 hour**

Method: Group work

- Review the information covered on hypertension and
  1. Develop a hypertension awareness poster to share with the health committee, health facility or in any public place in the community.
  2. Develop an awareness workshop on hypertension.
  3. Practise some breathing exercises to reduce stress.



1. Connect Nose and Lungs

Sssssssssssssssss  
Smile  
Bright White Colour  
Feel quality shift from  
Sadness to Courage



3. Connect Nose and Lungs

Ssssshhhh  
Green  
Anger  
Frustration } Kindness



5. Mouth and Spleen

Round Mouth  
Throat breathing  
Shiny yellow  
Panic } Openness  
Worry } Fearless



2. Ears and Kidneys

Whooooow  
Gentle blue  
Fear → Gentleness



4. Tongue and Heart

Haaaaaaaah  
Red  
Hate  
Cruelty } Love  
Impatience } Joy



6. All encompassing

Heeeeeeeeh  
Breathe in through crown  
of head and out through  
soles of feet.

## 6. DIABETES

### Diabetes in S.A.

It is estimated that 7% of South Africans between the ages of 21 and 79 years are living with diabetes. This is 3.85 million South Africans in this age group. Rates have gone up over the last 15 years. Compared to 415 million people who have diabetes in the world, more than 14 million people are in the African Region. It is anticipated that this amount will double by 2040. In South Africa, the recent small study done (3,820 people) showed that only 38 per cent of those who tested positive for were aware of their condition. Most people who were aware were on treatment, but it was only effective in 24 per cent of cases. Limited awareness and ineffective treatment meant that only eight per cent of people with had their condition under control. For poorer people living in rural districts rates of control were particularly low. For this reason, not only is diabetes common, it is a difficult disease to manage.

**Did you Know?** Sometimes cultural beliefs also play a big role in managing diabetes. According to registered dietician Suna Kassier, many African communities enjoy gaining weight as this is believed to show that they have achieved something. Furthermore, gaining weight carries the status in that “It signifies dignity and respect, and shows that you’re enjoying wealth and a good life. On the other hand, being thin carries a stigma which is “associated with hardship, trouble at home and serious illnesses such as TB or HIV/Aids.

**Did you Know?** The term diabetes is the shortened version of the full name Diabetes Mellitus. Diabetes Mellitus is derived from the Greek word diabetes meaning siphon – to pass through, and the Latin word mellitus meaning honeyed or sweet. This is because in diabetes excess sugar is found in blood as well as in the urine. Diabetes was known in the 17th century as the ‘pissing evil.’

### Activity 1: Understanding Diabetes

15 minutes

Method: Plenary

What cause diabetes? The facilitator writes up responses through a brainstorm.

**Definition:** Diabetes is defined as a condition where the body does not use the sugar that is absorbed from the diet properly. This could be due to a lack of the hormone insulin or because the insulin that is available is not working effectively. There are two common types of diabetes; type 1 and type 2, gestational diabetes is also public health concern. The problem with type 1 diabetes is that the person's cells are deprived of the sugar they need for energy. Without the insulin, a hormone produced by the pancreas to control blood sugar, sugar has difficulty entering the body's cells for the body to function well. This causes the body cells to start burning fat for energy; in turn leading to rise in blood sugar levels which can trigger a life-threatening coma. This is termed diabetic ketoacidosis. Diabetic ketoacidosis is a medical



emergency that needs to be treated quickly, usually in a hospital setting. The most common types are type also known as insulin dependent diabetes. The second type is type 2 diabetes, which is also known as non-insulin dependent or maturity onset diabetes.

### 1. Type 1 Diabetes

This is a condition in which the immune system attacks and destroys the cells in the pancreas (an organ behind the stomach) that produce insulin. This damage may lead to complete insulin deficiency. When the body's immune system destroys something of the body, it is called an autoimmune disease. The destruction may take time, sometimes starting in childhood, but when the disease starts, the onset of the effects is rapid and may occur over a few days to weeks. **Treatment:** Type 1 diabetes must always be treated with insulin, and will not respond to insulin stimulating medicines (used for Type 2 diabetes).

### 2. Type 2 Diabetes

This type of diabetes is known as a form of diabetes that is not dependent on insulin for treatment. Because it tends to occur in older people within increasing age, it was also known as maturity-onset diabetes mellitus.

### 3. Gestational Diabetes

Gestational diabetes is when pregnant women who have never had diabetes before but who have high blood glucose; the main sugar found in the blood and the body's main source of energy. The cause of gestational diabetes is not well understood. During pregnancy, the placenta supports the baby as it grows. There are hormones from the placenta that help the baby develop. It is believed that these hormones also block the action of the mother's insulin in her body. This problem is called insulin resistance. Gestational diabetes starts when your body is not able to make and use all the insulin it needs for pregnancy. Without enough insulin, glucose cannot leave the blood and be changed to energy.

## Definitions

**Placenta:** An organ that develops in your uterus during pregnancy. It provides oxygen and nutrients to your growing baby and removes waste products from your baby's blood.

**Hormones:** Chemical messengers that are secreted directly into the blood, which carries them to control most major bodily functions.

## Activity 2: Preventing Gestational Diabetes

45 minutes

Method: Buzz Session

With a partner reflect on the things that pregnant women can do to prevent this chronic disease. Discuss:

- What services exist to support pregnant women?
- What educational programmes exist to inform pregnant women?
- Where should these services be?

**Diabetes in Children:** Children just like adults are also at risk of getting diabetes. Diabetes in children has been linked to the doubled number of children and tripled number of adolescents that are obese over the last 30 years. Dealing with a chronic illness such as diabetes may cause emotional and behavioural challenges.

### Signs and Symptoms

Being very thirsty. *Feeling hungry. Feeling tired all the time. Having blurry eyesight. Feeling numbness or tingling in your feet. Losing weight without trying.* Fungal infections.

### Risks for Type 1 diabetes:

- Diet
- Family history
- Viruses (e.g. mumps and measles)

### Risk for Type 2 diabetes

- Overweight
- Pregnancy
- Diet low in fibre
- High in sugar

### Some sources of fibre



### Risks for Gestational Diabetes

A foetus growing inside a woman who has diabetes may be exposed to high levels of blood glucose (sugar in the blood) during the pregnancy if the diabetes is not well controlled. This may result in excessive birth weight, obstructed labour, low blood sugar, prematurity (preterm birth), Respiratory distress syndrome, problems with the concentration of salts in the blood of the newborn, genetic malformation and, in severe cases, death of the newborn. Gestational diabetes can also have an impact on the mother. Women who suffer from gestational diabetes are more likely to get type 2 Diabetes Mellitus later on in their lives. They are also at increased risk of gestational diabetes for any successive pregnancies.

## CASE STUDY

*"When I was diagnosed with diabetes, it was a surprise. I didn't feel unwell, but I had been losing weight and I felt thirsty all the time. I was drinking lots of water and going to the loo more often. I had to get up twice in the night to pass urine, which wasn't normal for me.*

*Seeing the doctor: When I described my symptoms to the doctor, he said it sounded like diabetes symptoms. Blood tests confirmed I had type 1, which usually develops earlier than 43, but can develop in older people. I was worried because I didn't know anything about diabetes. I didn't like the idea of giving myself injections. At first, I was given tablets to stimulate the pancreas to produce insulin.*

*I also had to change my diet. I needed to avoid sugar, so I gave up cakes, chocolates, sweets and sugar in my tea and coffee. It wasn't as difficult as I'd expected, but I confess I still eat cakes every now and then. The doctors also recommended a healthy diet with no fatty foods, so no chips or anything else fried. I loved sausages, eggs, bacon and jam, it was too hard to give them up, this is what I have been eating my whole life...I could not imagine my world without these... When blood sugar levels get too high, I feel tired and can't deal with problems so well.*

*I also have to test my blood sugar levels before every meal with a finger-prick kit so I know how much insulin I need. When you've taken your insulin, you need to eat soon afterwards. I forgot once. Next thing, I collapsed on to the kitchen floor, so my partner called an ambulance."*

<b>Myth</b>	<b>Fact</b>
<i>"Diabetes is not that big of a deal."</i>	Diabetes is a big deal, but if you manage it right, you may be able to help delay or even avoid some diabetes-related health complications still to come.
<i>"People who are overweight eventually get diabetes."</i>	Being overweight is just one risk factor for developing diabetes. There are other factors, such as family history, race or ethnicity, and age. By knowing all of the risk factors, you may better understand your overall risk and what you can do to improve your health.
<i>"Eating too much sugar can cause type 2 diabetes."</i>	As mentioned above, weight gain is one risk factor for getting diabetes. Taking in too many calories causes an increase in weight. Calories are units of measuring energy; it's a way of describing how much energy your body could get from eating or drinking something; drinking sugary drinks is one way to take in extra calories.
<i>"Having diabetes always leads to bad health problems."</i>	If you follow your diabetes care plan, you may be able to delay or prevent diabetes-related health problems.
<i>"It's your own fault that you have diabetes."</i>	Diabetes isn't anyone's fault. No one knows what causes diabetes. Your eating and activity choices can play a role in your blood sugar control. But it's not the whole story.
<i>"Diabetes is contagious."</i>	No. You can't catch diabetes from someone else like a cold or the flu. But it's important to know that type 2 diabetes can run in families.
<i>"People with diabetes get more colds, flus, and other illnesses."</i>	Not true. People living with diabetes are no more likely to catch a cold than someone who does not have diabetes. But, those with diabetes are advised to get a flu shot because any illness may make diabetes harder to manage.
<i>"Fruit is good for you, so it</i>	It is true that fruit is a healthy food. Fruit is full of fibre, vitamins, and

<i>is okay to eat as much as you want."</i>	minerals. But because fruits contain carbohydrates, which are broken down into sugars by your body, it is important that you eat only as much fruit as stated in your meal plan. Speak with your diabetes care team or dietitian about your meal plan if you're not sure.
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People with diabetes should be regularly screening for complications – such testing one’s heart, one’s eyes and one’s kidneys. Persons with diabetes also should have their circulation checks and have a regular foot assessment.

### CONSEQUENCES

**Eyes:** Diabetes can lead to eye problems, some of which can cause blindness if not treated, these are glaucoma, cataracts, diabetic retinopathy

- Kidney Disease • Nerves • Peripheral diabetic neuropathy can cause pain and burning or a loss of feeling in your feet. It usually starts with your toes. It can also affect your hands and other body parts.
- Autonomic neuropathy stems from damage to the nerves that control your internal organs. Symptoms include sexual problems, digestive issues (a condition called gastroparesis), trouble sensing when your bladder is full, dizziness and fainting.

### Case study

**Diabetes Health Clubs:** *“We just had our first Diabetes Club lunch! We had been talking about getting together with all the families we know who have children with type 1 diabetes. Our little circle is growing! Of course we never like to hear of another type 1 diagnosis, but at the same time, it’s a great feeling when you can reach out to each other and feel the solidarity and support that comes from associating with people who are in the same situation as you. So, after talking for months about how nice it would be to get together, we finally made the invitations through the health facility and had everyone coming over to our organisation for a lovely (and lively) Saturday lunch. It was a great success! Everyone helped bring the food, and it turned out delicious and beautiful! We had chicken and three vegetables salad. It was funny... as we were all assessing the food that we brought for each of our kids with diabetes, we realized what a low-carb meal it was! (low carb meal is a diet that has less carbohydrates e.g. sugary drinks, bread) Even though we didn’t specifically assign everyone to bring something low carb, it ended up that way.”*

### Did you Know?

**The following homeopathic and food remedies were used to treat Diabetes:**

- ✓ **Celery** to reduce blood sugar.
- ✓ Eating raw **carrots** daily.
- ✓ **Onion** and **garlic** eaten on a piece of bread help to reduce sugar levels.
- ✓ **Stinging nettle** has a favourable influence on the pancreas and reduces blood sugar. In this case, Stinging Nettle extract is used.
- ✓ Liquid remedy: 4 tablespoons of **Blueberry leaves**, (picked before the berries ripen) are added to 2 litres of cold water, brought to boil and simmered until the water is reduced to half the amount. A cup of this decoction is taken three times a day.

## Tests and Diagnosis

**You can only know if you have diabetes by going to your local clinic or hospital to test.** There are a number of tests done to diagnose diabetes.

A screening (finger prick) blood test done at the clinic or pharmacy will give an indication of your blood sugar level.

A normal fasting blood glucose level is between 4 - 5.6 mmol/l, while for non-fasting (tested at any time during the day) 4 - 7.8 mmol/l is acceptable.

When the blood sugar levels are above these limits, a doctor would need to do a formal test to diagnose diabetes. You would be required to fast for eight hours and a blood sample is taken to test the glucose level.

Diabetes can be diagnosed when the fasting blood glucose level is 7 mmol/l or higher.

### Activity 3: Prevention Strategies

15 minutes

Method: Plenary

Read the passage below and respond to the following questions.

- Is this an effective prevention strategy?
- Who benefits from sugar tax?
- If you were the National Minister of Health, what would you do?

#### Sugar Tax

South Africa followed the footsteps of other countries, such as Mexico, by introducing a sugar tax - levied on sweetened sugar beverages (SSBs), to be effective from 1 April, 2017. The main aim of this tax is to discourage unhealthy eating habits that have led to the increasing rates of obesity in the country. Obesity is a root cause of many illnesses and chronic diseases including diabetes in the Sub-Saharan region.

### Activity 4: Community Responses

30 minutes

Method: Group Work

What are some of the activities that we can host to raise awareness of the dangers of Diabetes, share prevention information and support community activities to manage those suffering with chronic diabetes.

## 6. ASTHMA

### Asthma in S.A.

According to a recent report by the Global Initiative for Asthma (GINA), South Africa has the world's fourth highest asthma death rate among 5 to 35 year olds. Of the estimated 3.9 million South Africans with asthma, 1.5% die of this condition annually.

*"Asthma prevalence in Southern Africa is higher than any other area on the continent, with more than 20% of school children across the region suffering from this condition. In South Africa asthma is the third most common cause of hospital admissions of children, yet only 2% of asthmatics receive treatment."* Cipla Medpro Medical Director, Dr Nic de Jongh.

Media 24 September 2012.

### What is Asthma?

Asthma is inflammation in the airways, normally caused by irritants. The disease is characterised by varying degrees of severity of airflow limitation and chronic inflammation of the lungs. Symptoms include wheezing, coughing, tightness in the chest and shortness of breath.

### History of Asthma

- The earliest recorded reference to respiratory distress – a disorder characterized by “noisy breathing” (wheezing?) is found in China in 2600 BC.
- The Babylonian “Code of Hammurabi” recorded symptoms of breathlessness: “If a man’s lungs pant with his work.” (1792-1750 BC).
- Hippocrates (~400 BC) was the first to use the term “Asthma” (Greek for “wind” or “to blow”) for panting and respiratory distress. He is considered to be the physician who identified the relationship between the environment and respiratory disease correlating climate and location with illness. Some suggest he was the first allergist.
- When Alexander the Great invaded India, smoking the herb stramonium (an anticholinergic agent related to ipratropium and tiotropium currently used in inhalers) was used to relax the lungs.
- Roman doctors described asthma as gasping and the inability to breathe without making noise. They noted “if from running or any other work, the breath becomes difficult, it is called asthma.” Pliny the elder (~ 50 AD) observed that pollen was a source of respiratory difficulty and recommended the use of “ephedra” (forerunner of ephedrine) in red wine as an asthma remedy. Unfortunately, he also suggested that drinking the blood of wild horses and eating 21 millipedes soaked in honey could help.

### Activity 1: Knowledge of Asthma

15 minutes

Method: Buzz Session

With a partner discuss a case of asthma that you know about, describing how it started and its treatment.

## Did you Know?

The Jewish Talmud (200-500 AD) counselled “*drinking three weights of hiltith,*” a resin of the carrot family as a therapy for asthma. Maimonides (1135-1204 AD), Jewish scholar and Saladin’s physician treated the Egyptian’s son for asthma. His “*Treatise on Asthma*” prescribed rest, good personal hygiene and environment, avoidance of opium, a small quantity of wine and a special diet.

Nuts, fruit, milk, cool vegetables and legumes (peanuts are a member of this family) were forbidden, while “The soup of fat hens” was considered beneficial. Tobacco introduced from the America’s to Europe (1500’s), was used to induce coughing and expectorate mucus. In Central America, Aztecs ingested an ephedra containing plant to clear mucus and, in South America, Incas treated asthma with a cocaine-like dried leaf. In the 1800’s, Arsenic was prescribed for respiratory conditions. In the early 1900’s, allergy immunotherapy was first introduced to treat asthma.

## What Causes Asthma?

Asthma is a serious condition and a person suffering from asthma should be taken to a doctor for diagnosis and treatment.

According to the Asthma Society of Canada, doctors define asthma as “chronic inflammatory disease of the airways.” With asthma, the airways in your lungs (bronchial tubes) overreact to allergens or irritants (triggers), causing them to become inflamed and constricted. These airways carry oxygen and air to and from your body. When they become constricted or tighten, breathing becomes difficult and they begin to make more mucous, which causes even more **constriction**.

Long-term asthma medications can control the onset of asthma symptoms and short-term “rescue” medications rush in to alleviate asthma symptoms when there is a flare-up. Uncontrolled asthma is the most common reason for school absences, missed work or reduced productivity while at work because of the severity of asthma symptoms on any given day.

The cause of asthma is not yet determined but triggers such as allergens and irritants in the air can cause symptoms of the condition, according to Asthma and Allergy Foundation of America. Common symptoms include shortness of breath, wheezing, coughing, and chest pain or tightness.

**Asthma triggers** are different from person to person and can include: Airborne substances, such as pollen, **dust mites**, mold spores, pet dander or particles of cockroach waste. **Respiratory infections**, such as the common cold. Physical activity (exercise-induced asthma)

## Possible signs and symptoms of asthma in children include:

- Frequent coughing spells, which may occur during play, at night, or while laughing or crying.
- A chronic cough (which may be the only symptom)
- Less energy during play.

- Rapid breathing (intermittently)
- Complaint of chest tightness or chest "hurting"

### Prevention

No one knows for certain what causes asthma, but it is generally believed that allergens or genetics or an abnormal nervous system response to certain stimuli and environmental factors play key roles (e.g. living in an asbestos brick house.). There is no known "cure" for asthma, therefore, it is considered to be a life-long chronic illness. Identifying the external factor and removing the person or the allergen would be a key prevention strategy.

### Activity 2: Knowledge of Asthma

30 minutes

Method: Group Work

List various cases of asthma that people in the group know of. Discuss possible environmental factors. E.g. Do they have a family pet that the child could be allergic to? Is there a pollen tree next to the house? What kind of material is the house made of?

Discuss possible remedies. E.g. invest in a vacuum cleaner to regularly remove the pet's hairs from mats etc.

An estimated 300 million people suffer with asthma worldwide, and that number is climbing. According to the World Health Organization, asthma accounts for more than 180 000 deaths worldwide every year, and it is the most common chronic illness among the world's children.

### Typical symptoms of asthma include:

Asthma causes breathing problems in response to many different types of allergens or other irritants. Because of the variety of triggers, it can be a challenging condition to treat... and asthma attacks can strike at any time!

- Shortness of breath or difficulty breathing
- Wheezing when you exhale
- Coughing
- Tightness in the chest
- Inability to sleep because of breathing/wheezing/coughing symptoms

In an acute asthma attack, these symptoms rapidly become even more severe and, as the airways get even tighter and more inflamed, along with increased mucous production, you might also experience:

- Problems speaking or focusing
- Extreme anxiety or panic symptoms
- The inability to "catch" your breath
- Lips and fingernails that turn blue
- Severe wheezing when you inhale and exhale
- Extreme sweating of the face, paleness



Having an asthma attack plan of action helps you to recognize the early symptoms of an attack so you can prevent a full-blown and far more serious and severe asthma attack. It is especially important for a child with asthma to be able to monitor his or her own symptoms and to be able to let a teacher or caregiver know when urgent help is required so that appropriate action can be taken.

### **Asthma Diagnosis and Classification**

To diagnose asthma, a health care professional will usually take a full health history, including family medical history, and inquire about the presence of any symptoms that appear to be asthma-related and what might be triggering those symptoms (allergies, pets, smoke in the home, foods, etc.)

After the health care practitioner has rendered an asthma diagnosis, he or she must then go about classifying the severity level of the asthma. Depending on the frequency and severity of the individual's asthma symptoms, a classification that ranges from mild intermittent to severe persistent is applied. That classification is then used to decide the specific course of asthma treatment that is required.

#### **Activity 3: Identify the cause**

**30 minutes**

Method: Plenary

Read the case study below and identify the initial cause of the asthma.

Discuss: What 3 steps did John's mother take? Which of these was the cure?

#### **CASE STUDY**

When John was two-years-old his mother moved to a new neighbourhood. He developed a runny nose and shortness of breath. After a few months he started wheezing and it was clear that he was having difficulty breathing. When he went into distress he was rushed to hospital. At the children's hospital, he was diagnosed with asthma. The doctor discovered that there was a big tree with masses of yellow pollen next to the home and told the mother that it was probably the cause. John was put on a ventilator to strengthen his airways and was sent home.

Two months later he had another attack. His mother decided to take action. She bought a home nebulizer and whenever his nose started running and he started wheezing, she would put him on the nebulizer to prevent a full blown attack. She also went to a homeopathic doctor. He prescribed a liquid to be taken once daily with John's water bottle. She rented out their place and moved to a place without any pollen trees. John is now twenty two and has not had another asthma attack.

## EPILEPSY

### History of Epilepsy

Epilepsy is one of the world's oldest recognized conditions, with written records dating back to 4000 BC. The earliest mention of epilepsy found begins with the Babylonians, and is almost as old as civilization. The Greeks also have records of epilepsy and called it the Sacred Disease.

In 400 B.C. Hippocrates, the father of medicine, offered another view of epilepsy, that it was just another natural disease and could be treated through natural methods. He supported the use of medicine and control of the diet in order to cure this disease based on his theories of medical methodology. While his methods were hardly scientific he was the first to consider epilepsy to be a natural disorder and would be the only one to do so for centuries. The first surgical procedures on epileptic patients were performed during the 19th century.

### Did You Know?

The Greeks believed that epilepsy was the result of a curse from the gods delivered for the offense of the goddess Selene. It was believed that if you spent a night in the temple of Selene she would come to you in a dream and tell you how to remove the curse. What other beliefs are there in your community about epilepsy?

### Activity 1: Knowledge of Epilepsy

15 minutes

Method: Buzz Session

With a partner discuss a case of epilepsy that you know about, describing how it started and its treatment.

### Background

Epilepsy is a chronic non-communicable illness of the brain that affects people of all ages. Approximately 50 million people worldwide have epilepsy, making it one of the most common neurological illnesses globally. WHO and its partners recognize epilepsy as a major public health concern. WHO International League Against Epilepsy (ILAE) and the International Bureau for Epilepsy (IBE) are carrying out a global campaign – *“Out of the Shadows”* – to provide better information and raise awareness about epilepsy and strengthen public and private efforts to improve care and reduce the impact of the illness.

Stigma associated with having epilepsy, which is common to many cultures, can be a negative effect on the social identity of people with the illness, particularly those living in resource-poor communities. Although WHO projects on epilepsy have shown that there are simple, cost-effective ways to treat epilepsy in resource-poor settings, education and awareness raising events need to reach out to the whole community.

Although the social effects vary from country to country, the discrimination and social stigma that surround epilepsy worldwide are often more difficult to overcome than the seizures

themselves. People living with epilepsy can be targets of prejudice. The stigma can discourage people from seeking treatment for symptoms, so as to avoid becoming identified with the illness.

### **Definition**

Epilepsy is defined as a neurological condition which affects the central nervous system. People with epilepsy tend to have recurrent seizures (fits). Epilepsy is not infectious or contagious. The seizures occur because of a sudden surge (wave) of electrical activity in the brain - there is an overload of electrical activity in the brain. This causes a temporary disturbance in the messaging systems between brain cells. During a seizure the person's brain becomes "halted" or "mixed up".

Every function in our bodies is triggered by messaging systems in our brain, and the human brain is the source of human epilepsy. Although the symptoms of a seizure may affect any part of the body, the electrical events that produce the symptoms occur in the brain. What a person with epilepsy experiences during a seizure will depend on what part of the brain that epileptic activity starts, and how widely and quickly it spreads from that area.

In most brains, neuron interactions occur in a confused but balanced, orderly fashion with few disruptions. Occasionally, small disruptions (neuron misfires) may occur with little consequence. When various cells misfire at the same time, depending on the seriousness and location in the brain, it may cause muscle twitches and spasms. This is a seizure. A seizure is defined as a sudden, electrical discharge in the brain causing alterations or changes in behaviour, sensation (feeling), or consciousness.

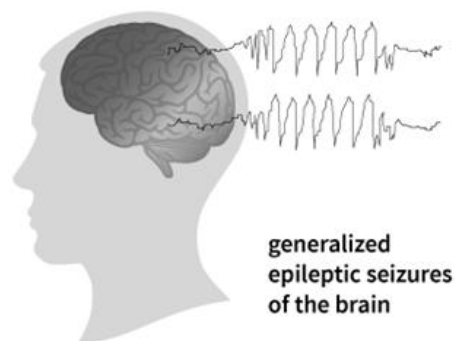
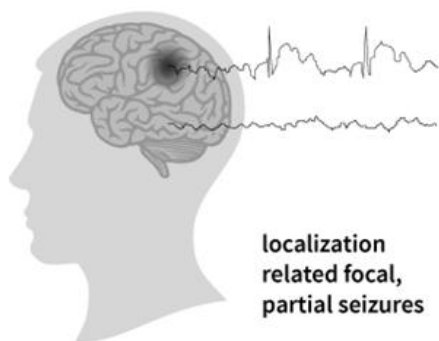
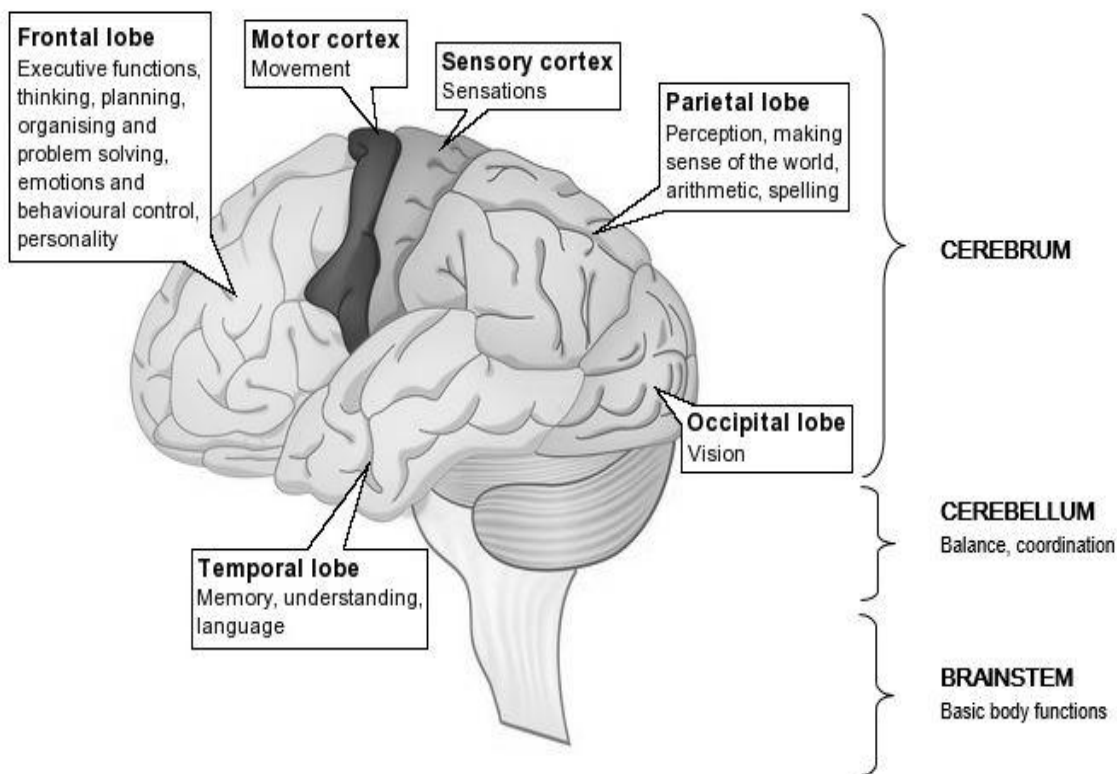
It can take many different forms and can affect different people in diverse ways. Some seizures are mild; the person may just feel absent for a second or two and not even notice that they have had a seizure. In other, more major seizures, the individual may lose consciousness, their body may become rigid or stiff and they may make fast jerking movements. There is approximately an 80% chance that an individual who has had two seizures will have more.

<b>Activity 2: Unpacking Terminology</b>	<b>30 minutes</b>
Method: Group Work	
Write the following words in one column and its definition in another and share in plenary.	
Neurological	
Communicable	
Seizure	
Methodology	

## How the brain works

To understand what a seizure is, let us first understand how the brain works. As the brain goes about its daily functions, millions of electrical and chemical signals pass from its nerve cells out to the body. These electrochemical messages are necessary for almost everything we do and feel. Your brain is comprised of thousands of neurons – cells that process and transmit information by interacting with each other. These interactions can be observed and assessed through an electroencephalogram (EEG).

### Functions of the Brain



**Activity 3: Functions of the brain****15 minutes**

Method: Individual work

Each person draws the six brain compartments and its functions without looking in the training manual.

One of the most common seizure types is a convulsion. In this type of seizure, a person may stiffen and have jerking muscle movements; during the muscle-jerking, the person may bite their tongue, causing bleeding or frothing at the mouth.

Other seizure types are less dramatic. Shaking movements may be isolated to one arm or part of the face. Alternatively, the person may suddenly stop responding and stare for a few seconds, sometimes with chewing motions or smacking the lips.

Seizures may also cause "sensations" that only the person feels. As an example, one type of seizure can cause stomach discomfort, fear, or an unpleasant smell. Such subjective feelings are commonly referred to as auras. A person usually experiences the same symptoms with each seizure aura. Sometimes, a seizure aura can occur before a convulsive seizure.

**The difference between epilepsy and a seizure**

Many people cannot tell the difference between having a seizure and having epilepsy, these terms are commonly used as meaning the same thing. Although the two terms are often used simultaneously, they are not the same.

An epileptic seizure is a brief occurrence of signs and or symptoms due to abnormal excessive neuronal activity in the brain. A seizure is viewed as an event and epilepsy is the illness involving continuing (recurrent) unprovoked seizures. Up to 10% of people worldwide have one seizure during their lifetime. Epilepsy is defined as having 2 or more unprovoked seizures, this means two seizures that were not caused by some known medical condition. Epilepsy is not a mental illness or psychiatric disorder.

**A person is considered to have epilepsy if they meet any of the following conditions.**

- ❖ At least two unprovoked (or reflex) seizures occurring greater than 24 hours apart.
- ❖ One unprovoked (or reflex) seizure and a probability of further seizures similar to the general recurrence risk (at least 60%) after two unprovoked seizures, occurring over the next 10 years.

If the cause of the seizure is not associated with a withdrawal from drinking alcohol or other factors that may cause seizures such as blood sugar problems, the person may be diagnosed with epilepsy. The word "epilepsy" does not indicate anything about the cause of the person's seizures or their severity.

## Different Types of Epilepsy

Seizures have many differing causes and are a feature of various states of ill-health. They may be the only manifestation of disease, caused by a specific brain disorder, or are part of a more generalised bodily illness.

Primary	Secondary	Isolated
Seizures where the brain is abnormally prone to seizure activity, probably due to an inherited tendency. These are often seen in children and teenagers.	Typically due to spread from a seizure focus (a scar).	Related to an underlying brief medical condition, and will stop as soon as the underlying condition is effectively treated. Examples include organ failure (liver or kidney failure), infections such as meningitis, head injury, brain surgery, drug and alcohol abuse.

**Signs and symptoms before the seizure include:** Awareness, Sensory, Emotional or Thought Changes:

- ✓ A feeling of being there before but never have
- ✓ A feeling that something is very familiar but it isn't
- ✓ Smells
- ✓ Sounds
- ✓ Tastes
- ✓ Visual loss or blurring
- ✓ "Strange" feelings
- ✓ Fear/panic (often negative or scary feelings)
- ✓ Pleasant feelings
- ✓ Racing thoughts
- ✓ Physical Changes
- ✓ Dizzy or lightheaded
- ✓ Headache
- ✓ Nausea or other stomach feelings (often a rising feeling from the stomach to the throat)
- ✓ Numbness or tingling in part of the body

### During the seizure:

**Awareness, Sensory, Emotional or Thought Changes:**

- ✓ Loss of awareness (often called "black out")
- ✓ Confused, feeling spacey
- ✓ Periods of forgetfulness or memory lapses
- ✓ Distracted, daydreaming
- ✓ Loss of consciousness, unconscious, or "pass out"
- ✓ Unable to hear

- ✓ Sounds may be strange or different
- ✓ Unusual smells (often bad smells like burning rubber)
- ✓ Unusual tastes
- ✓ Loss of vision or unable to see
- ✓ Flashing lights
- ✓ Formed visual hallucinations (objects or things are seen that aren't really there)
- ✓ Numbness, tingling, or electric shock like feeling in body, arm or leg
- ✓ Out of body sensations
- ✓ Feeling detached

**After the Seizure: Awareness, Sensory, Emotional or Thought Changes:**

- ✓ Slow to respond or not able to respond right away
- ✓ Sleepy
- ✓ Confused
- ✓ Memory loss
- ✓ Difficulty talking or writing
- ✓ Feeling fuzzy, light headed or dizzy
- ✓ Feeling depressed, sad, upset
- ✓ Scared
- ✓ Anxious
- ✓ Frustrated, embarrassed, ashamed

**Risks**

The underlying cause of the epilepsy is unknown. Causes of epilepsy vary by age of the person. Epilepsy is not a disease but rather a symptom of disturbed brain function, which can be caused by many different disease processes. But what's true for every age is that the cause is unknown for about half of everyone with epilepsy. A risk is something that makes a person more likely to develop seizures and epilepsy. The risks for epilepsy include:

**In New-borns**

- Brain malformations
- Lack of oxygen during birth
- Low levels of blood sugar, blood calcium, blood magnesium or other electrolyte problems
- Inborn errors of metabolism
- Intracranial hemorrhage
- Maternal drug use

**In Infants and Children**

- Fever (febrile seizures)
- Brain tumour (rarely)
- Infections (e.g. meningitis)

### **In Children and Adults:**

- Congenital conditions (Down's syndrome; Angelman's syndrome; tuberous sclerosis and neurofibromatosis)
- Genetic factors
- Progressive brain disease (rare)
- Head trauma
- Hemorrhage on the brain

### **In Seniors**

- Stroke
- Alzheimer's disease
- Trauma

### **Other risks for epilepsy include**

- ✓ AIDS and AIDS-related neurological conditions
- ✓ Withdrawal from alcohol
- ✓ Exposure to toxins, such as lead or carbon monoxide
- ✓ Infections of the brain such as meningitis and encephalitis

### **Epilepsy S.A.**

**Did you know?** The organisation, Epilepsy S.A provides education, work and support to patients suffering from epilepsy.

### **Triggers**

Even though you may not know the cause of your epilepsy, you can look at whether there are factors (often called 'triggers') that trigger or provoke seizures. These triggers may make a person with epilepsy more likely to have a seizure in certain situations.

- ✓ Missed medication
- ✓ Lack of sleep or disrupted sleep
- ✓ Illness (both with and without fever)
- ✓ Psychological stress
- ✓ Heavy alcohol use or seizures after alcohol withdrawal
- ✓ Use of cocaine and other recreational drugs such as Ecstasy
- ✓ Over-the-counter drugs, prescription medications or supplements that decrease the effectiveness of seizure medicines
- ✓ Nutritional deficiencies: vitamins and minerals
- ✓ Poor eating habits, such as long times without eating, dehydration or not enough fluids
- ✓ The menstrual cycle or hormonal changes
- ✓ Flashing lights or patterns
- ✓ Specific activities, noises or foods



## TUBERCULOSIS (TB)

### History of TB

**2400-3400 B.C** – When researchers discovered mummies from the period of the Pharaohs, they found that they had tuberculosis in their spines. This means that TB was present in the population of ancient Egypt.

**Middle ages** – TB was also present in the middle ages because evidence of tuberculosis of the lymph nodes of the neck was found. It was called scrofula.

**In 460 BC** – Hippocrates, a philosopher from Ancient Greece, created the term phthisis.

**17th, 18th and 19th centuries** - TB was rampant among Europeans including those who had immigrated to the US.

**1720** - Benjamin Marten, an English physician, was the first to suspect that tuberculosis could be caused by "minute living creatures" and that by coming into contact with another person with consumption, an individual could contract the disease.

**18th century** - Tuberculosis reached its peak in Western Europe with a rate of 900 deaths per 100,000. The term White plague emerged around this time.

**1821** - Dr James Carson, a Scottish physician began treatment by draining water that had collected around the lungs (called a pleural effusion) and found surgery helped prolong life. This surgery for tuberculosis was common and lifesaving before effective antibiotics for treating TB was found.

**1882** - Robert Koch showed that M. tuberculosis was the cause of tuberculosis. The bacteria was called Koch's bacillus and. Koch was awarded the Nobel Prize for this discovery in 1905.

**1994** - Doctors discovered that treatment of TB with one drug alone would lead to the disease becoming resistant to medicine (Drug resistant TB). As a result, the treatment of TB began to require two or more drugs to be effective.

### TB in SA

Cases of TB were first noted in South Africa in the 1900s and it has continued to rise steadily. During the 1960s the rate of TB reached 350 cases per 100,000 populations – which means about 1 in 300 people in the general population would get TB each year. In the late 1990s, because of the HIV epidemic, the rates of TB rose dramatically. In some parts of the country, 1 in a 100 persons develops TB each year, because HIV increases your chances of developing TB.

**South Africa has one of the world's worst TB epidemics**, and the TB rate has increased four-fold over the past 15 years. The South African National AIDS Council (SANAC) released its first progress report on the National Strategic Plan (NSP) for HIV, TB and STIs (2012 – 2016) in 2014. The report showed slow progress in achieving the NSP targets of reducing new TB infections and deaths by 50%.

There is also a very high incidence of TB among **mine workers** in South Africa, the highest in the world. The WHO classifies 250 cases per 100,000 people as a health emergency, but the rate in the mines in South Africa is somewhere between 3,000 and 7,000 cases per 100,000 people. For this reason, the spread of TB in the mining sector has been described as one of the worst public health epidemic that South Africa is currently facing. The TB epidemic is so bad amongst miners because of HIV and because of the high dust levels in South African mines, which has not been properly controlled, despite decades of efforts to reduce dust in underground mines.

The prison population are also susceptible to the TB infection due to the prison conditions and density of prison populations

**Activity 1: Knowledge of TB**

**15 minutes**

Method: Buzz Session

With a partner discuss a case of TB that you know about, describing how it started and its treatment.

**What is TB?**

Pulmonary tuberculosis can be described as a slow-growing bacterial infection that occurs in your lungs. You can contract this air borne infection when you breathe in the droplets that have been sneezed or coughed out by an infected person. Anyone can get pulmonary tuberculosis, but the risks of infection are much higher in:

- Seniors and elderly people
- Babies and infants (below the age of 6 months)
- People with compromised a immune system (due to diabetes, HIV/AIDS, chemotherapy)
- Underweight people or those suffering from malnutrition

Most people can make a complete recovery from tuberculosis if they adhere to the prescribed medication, though the treatment could take many weeks or even months. In some people, the disease gets activated within weeks after exposure to the bacteria, but it is also possible for the bacteria to stay inactive or dormant in the body for years.

If they cannot be cleared by the immune system, they can then go on to damage other body parts such as the stomach, kidneys, the bones, joints, nervous system, lymph nodes and skin. This is called extra-pulmonary TB.

**Drug Resistant TB**

Although the TB disease is treatable, there are forms of TB that are difficult to treat because the bacterium becomes resistant to the drugs used for TB. The difficulty of treatment is increased if the bacteria are resistant to more than one antibiotic. Drug-resistant TB has a much lower cure rate.

Drug-resistant TB can occur when the drugs used to treat TB are not taken regularly. This can occur if:

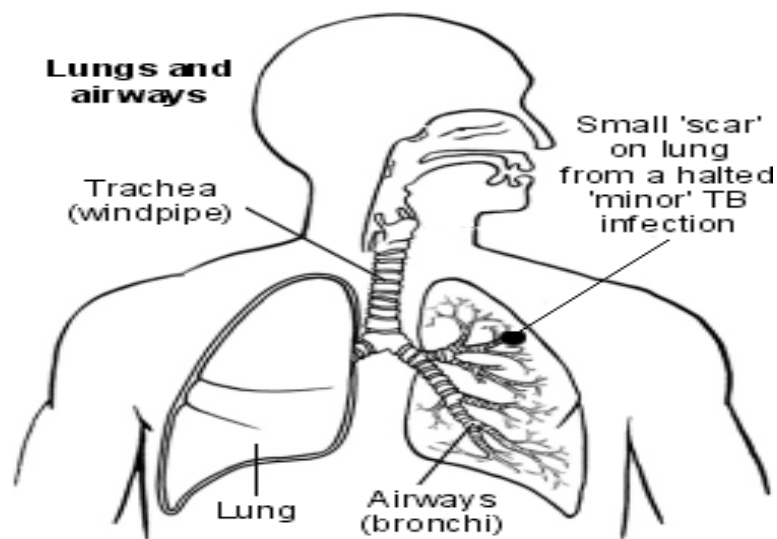
- ✓ People do not complete a full course of TB treatment
- ✓ Health care providers prescribe the wrong treatment (the wrong dose or length of time)
- ✓ Drugs for proper treatment are not available
- ✓ Drugs are of poor quality
- ✓ People do not take their TB drugs regularly

✓ People do not take all of their TB drugs

Some people can catch MDR or XDR TB from others around them. So, their MDR or XDR TB is not because they did not take their medicines properly but simply because they caught a more dangerous form of TB from someone else.

**Multidrug resistance (MDR):** Is caused by TB bacteria that are resistant to two of the main and most potent TB drugs used for TB (isoniazid and rifampin). MDR TB is transmitted like ordinary TB. It is more difficult to treat. It requires more antibiotics taken for a long period (up to 18 months). Some of these antibiotics involved injections and some cause some serious side effects (like deafness).

**Extensive drug resistance (XDR):** It is a type of TB that is resistant to a range of TB drugs. It is worse than MDR TB because not only is the patient resistant to isoniazid and rifampin but also to other drugs (called fluoroquinolones and either of injectable drugs (such as amikacin, kanamycin, or capreomycin). Because XDR TB is resistant to the most potent TB drugs, patients are left with very few effective treatment options. Cure is uncommon for XDR TB.



Picture taken from: <http://patient.info/health/tuberculosis-leaflet>

There are two types of TB conditions: **latent TB infection** and **TB disease**.

**Latent TB infection:** Most people in good health who breathe in TB bacteria do not develop active TB disease. When the TB bacteria begins to multiply in the lung of healthy people, the immune system is stimulated into action. There may be some mild symptoms for a short time, or no symptoms, and the TB infection is halted. This is called latent tuberculosis, and only a tuberculosis skin test or blood test can detect it. With latent TB infection, a person is not contagious, and in 90 to 95 percent of cases, you could carry the tuberculosis bacteria all your life and never get sick from it.

However, if your immune system weakens, the dormant TB bacteria could start to grow and develop into active TB disease. This is what happens if someone has HIV. People with **active TB** usually have symptoms and may spread TB bacteria to others. However, if someone does have TB disease, and you go onto correct treatment, you are usually no longer contagious after 2 weeks of appropriate drug treatment.

### **Prevention: Developing a Strong Immune System**

**Leafy vegetables**, dark-colored **greens** like kale and **spinach**, for their high iron and B-vitamin content and **legumes** such as lentils are not only good for your health but also assist with building a strong immune system. TB flourishes in unfavourable conditions.

### **Activity 2: Understanding Socio-Economic Factors**

**30 minutes**

Method: Group work

Review the socio-economic factors listed below and discuss how each contribute to the spread of TB.

#### **1. Social and Economic Factors:**

- Extreme poverty
- Poor support networks
- Unstable living circumstances
- Substance abuse
- Beliefs about TB and its treatment

#### **What are some of the other factors?**

#### **2. Health System Factors:**

- Poor health infrastructure
- Poorly trained or supervised health care personnel
- Low levels of accountability of health staff
- Poor relationships with patients
- Inadequate development of community based support for patients

#### **3. Patient related factors:**

- Stigma
- Depression
- Disempowerment
- Poor knowledge about TB and the efficacy of treatment

#### **4. Therapy related factors:**

- Complex treatment regimens
- Large pill burden
- Adverse effects of medication
- Long treatment duration.

## Stigma

*"I found that there is stigma attached to tuberculosis – strange - why? I mean, why should anyone be ashamed to have that particular disease, and why are people to be stigmatized?"* Archbishop Desmond Tutu

### Activity 3: TB in Children

30 minutes

Method: Plenary

Share a story of a child that contracted TB. What were the circumstances? What were the results?

### TB in Children

Babies and children often have a weaker immune system than adults. Children are infected by TB in the same way as adults do, which is by inhaling TB bacteria in the air released into the air by someone with active TB. Mainly, the source of infection for children is usually an adult in their household who has active TB, is coughing and is contagious.

However, what is different in children is the clinical course of TB. After coming into contact with TB germ through inhaling it, the child develops an immune response a few weeks after this primary infection. While in most children whose immune system is strong enough to stop the TB bacteria from multiplying further to keep it dormant, other children are not as healthy enough to stop the bacteria from multiplying to develop into a TB disease.

### How TB is spread

TB spreads from one person to another through the release of microscopic (too small to see with the naked eye) droplets in the air. The spread of the disease generally occurs from someone who has untreated TB. Avoid exposure to be people with TB.



Prevention in high risk environments is important



Masks are also used in TB high risk areas.

### Myths and Facts

Facts	Myths
Droplets of TB germ is transferred during:	TB is <b>not</b> spread in the following ways
<ul style="list-style-type: none"> <li>▪ Sneezing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Shaking someone's hand</li> </ul>
<ul style="list-style-type: none"> <li>▪ Coughing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Sharing food or drink</li> </ul>
<ul style="list-style-type: none"> <li>▪ Speaking</li> </ul>	<ul style="list-style-type: none"> <li>▪ Touching bed linens or toilet seats</li> </ul>
<ul style="list-style-type: none"> <li>▪ Laughing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Having sex with an infected person</li> </ul>

### Signs and Symptoms

Knowledge of symptoms of TB or any other health condition is important in prevention as it provides people and communities with the warning signs of the dangers to be aware of in order for people to take necessary precautions and seek help.

People with latent TB infection do not have symptoms. When someone has TB disease, it will give rise to different symptoms.

#### Activity 4: Toxic Drugs

15 minutes

Method: Buzz session

With a partner, discuss the following:

- What are some of the side effects of TB drugs?
- What is Drug resistant TB?
- What is multi-drug resistance?

When someone has TB in the lungs (Pulmonary TB), the common symptoms are:

- A bad cough that lasts 3 weeks or longer. It tends to continue for months and get worse.
- In time the cough produces a lot of phlegm (sputum), which may be bloodstained. If it is very bad, a person can cough up pure blood.
- A high temperature (fever)
- Sweats, particularly at night – a person can wake up and the sheets are soaked from sweating.
- Feeling unwell
- Weight loss
- Pains in the chest
- Poor appetite
- Breathlessness - if the infection progresses and damages the lungs
- Weakness or fatigue

**If the TB infection spreads from the lungs to other parts of the body, other symptoms may occur:**

- Lymph glands - you may have a swollen gland or glands anywhere in the body. If the swollen glands are in the neck, armpit or groin then you may see or feel them.
- Gut and tummy (abdomen) - the TB may cause tummy pain or swelling, or poor digestion of food with diarrhoea and weight loss.
- Bones and joints - TB can get into a bone or joint, causing bone pain (for example, in the spine) or pain and swelling in a joint.
- Heart - TB sometimes causes inflammation around the heart, with chest pain or shortness of breath.
- Kidneys and bladder - if these are infected, you may have pain in the side (loin), or pain when passing urine.
- Brain - TB can cause meningitis which is an infection of the lining around the brain, which can be very dangerous. Symptoms include:

### **Risks**

#### **You are at increased risk for being infected with TB bacteria if:**

- ✓ You are in close contacts with a person who has active TB in the lungs (living in the same household, or spending a lot of time with that person).
- ✓ Homelessness –People living on the street at higher risk of TB
- ✓ Malnutrition: poor nutrition and lack of vitamin D are linked to TB
- ✓ Taxis: In poorly ventilated environments, including transport or living conditions in informal settlements
- ✓ Overcrowding: When there are too many people occupying a small space.
- ✓ You are mobile, migrant and refugee populations

### **Review**

#### **You have a higher chance of getting TB disease once infected if:**

- ✓ You have poor immune system: for example, due to HIV infection,
- ✓ You have alcohol (on average >40g alcohol per day) or drug addiction
- ✓ Age: babies, young children (younger than 5 years) and the elderly are more susceptible to develop TB disease
- ✓ You smoke cigarettes: Passive and active exposure to tobacco smoke
- ✓ You are diabetic
- ✓ You are malnourished or have silicosis (e.g. miners, quarry workers and stone cutters)
- ✓ You are on immune-suppressing treatment

#### **People living and working in close confines and exposed to TB patients are at higher risk:**

- ✓ Health care workers
- ✓ Miners
- ✓ Prisoners & prison officials
- ✓ Informal settlements
- ✓ Travelling by taxi

**Activity 5: Infection Hot Spots****15 minutes**

Method: Buzz session

Discuss with a partner other hot spots for contracting TB and share in plenary.

**Test and Diagnosis**

There are different tests to diagnose TB. Everyone should have access to tests that enable rapid diagnosis, treatment and care. Given the prevalence of drug-resistant tuberculosis, ensuring high quality and complete care will also benefit health of the community.

**Skin Test**

This is a test to tell if you have been infected with TB. A small amount of testing fluid, called tuberculin or PPD, is injected beneath the skin of the lower arm of the patient, who is asked to come back in 72 hours so the test can be read. If with the person is infected with TB, there will be a small lump and skin reaction at the injection site. The size of the swelling is what is measured. However, remember that infection with TB does not necessarily mean you have active, infectious TB. Most people with positive tuberculin tests do not have active TB.

If a person has active TB disease, a severe reaction may occur. The skin can become very red and, in some cases, break down. Rarely, swelling of lymph nodes may occur. A patient who does not return within 72 hours to have the test read will need to be rescheduled for another skin test.

**Sputum Test**

A sputum sample is the standard way TB is diagnosed. The sputum is coughed up and part of the sample is sent to a laboratory and part of it is examined under a microscope for TB bacteria. When the sputum is sent to the laboratory, it is grown in a special plate (cultured) to see if there are TB bacteria present. The microscope readying is done quickly – in a few days. As soon as the bacteria are confirmed under the microscope, treatment can be started. However, examining the sputum under the microscope may not be accurate and may miss an infection. That is why a culture is done to see if the TB mycobacterium grows. However, it may take up to six to eight weeks for a sputum culture to yield definite results. This is one of the reasons why there are long delays in starting patients on treatment, or in starting them on the right treatment.

**Chest X-Ray**

A chest X-ray is often used to diagnose TB. However, if your body fought off the infection, your lungs may be undamaged and your chest X-ray normal. Only if the TB mycobacteria have attacked your lungs and damaged the tissue of your lung will your chest X-ray will be abnormal. Also, there are other conditions that can also give people symptoms similar to those of TB, and also result in an abnormal chest X-Ray. That is why other tests are thus also often required to make a diagnosis of TB.



### **GeneXpert Machine**

The GeneXpert machine is a new TB way to diagnose TB much faster and more accurately than microscopic tests. It works on the basis of identifying the genetic material of the bacterium in the sputum. This piece of equipment improves the turn-around times and can produce results in just 2hrs. It can also help the provider to identify if the patient has a DR form of TB, though it does not pick up all forms of drug resistance. This is a major advance for the control of TB. It is more expensive than other tests but the cost is more than compensated for because it improves the accuracy of diagnosis and the speed of getting someone to start their correct treatment as soon as possible.

### **Other conditions that occur with TB**

Several medical conditions are risk factors for TB and for poor TB treatment results. Having TB can also complicate the course of these other diseases. When these conditions are very common in the general population they can be important contributors to the TB burden. Consequently, reducing the prevalence of these conditions can help prevent TB. TB share underlying social determinants with many of these conditions. Addressing the social determinants of health is a shared responsibility across disease programmes and other stakeholders within and beyond the health sector.

### **TB and HIV**

HIV & AIDS and TB are closely related diseases. They occur together so frequently that they are officially called comorbidities (diseases that occur together). Someone with HIV & AIDS will very often have Tuberculosis as well. So, tuberculosis is a common comorbidity of HIV & AIDS. This does not mean that everyone with TB has HIV or that everyone with HIV will develop TB.

People living with HIV & AIDS are about 30 times more likely to develop TB than persons without HIV. Sub-Saharan Africa has the largest number of people in the world infected with both HIV and TB – about 78% of all cases globally in 2013.

### **TB & Diabetes**

Diabetes triples the risk of being infected and developing TB disease. This means that the rates of TB are three times higher in people with diabetes than in the general population. Diabetes can worsen the clinical course of TB, and, if a person with diabetes develops TB, it can worsen their symptoms because their glucose in the blood is more difficult to control. The best care possible should be provided to patients who have both diseases.

Social factors such as poor diets, obesity, lack of exercise and marketing of unhealthy foods that are cheap have contributed to the growth in diabetes. Many people are calling for strong actions to reduce risk factors and address the social determinants of health. It is recommended that all patients with tuberculosis should be checked for diabetes and all patients with diabetes monitored for TB.

### **TB Management**

The aim of TB treatment and management is to:

- Cure the patient of TB
- Decrease transmission of TB to others
- Prevent the development of acquired drug resistance
- Prevent relapse
- Prevent death from TB or its complications

**TB Vaccine:** The TB vaccine, BCG, is often given to babies and children in countries where TB is common, although it's protective value is debatable. However, it is thought that BCG does offer increased protection against developing TB in parts of the body apart from the lungs (i.e. extra-pulmonary TB).

### **Did you know?**

*Children admitted to Tygerberg Children's Hospital with TB meningitis are often admitted too late to change their condition. While they are likely to survive, their chances of a normal, healthy life are dashed. TB meningitis can be devastating for children, leading to death or permanent disability, yet the disease can be prevented and treated if caught in time.*

#### **Brain damage**

*Stellenbosch University research has shown that only 15 percent of children admitted to Cape Town's Tygerberg Children's Hospital with TB Meningitis are in the early stage of the disease. By the time most children with TB Meningitis are admitted to the hospital, they are already showing mildly depressed levels of consciousness or have had strokes or fallen into a coma and suffered brain damage. "This is tragic, considering that TB Meningitis, if detected early, is fully treatable with a completely normal outcome," says Regan Solomons, paediatric neurologist at the Tygerberg Children's Hospital. He has recently investigated ways of improving the early and more accurate diagnosis of TB meningitis in children. The incidence of TB Meningitis in the Western Cape is amongst the highest in the world, with 50 children with TBM admitted to Tygerberg Children's Hospital every year. While the hospital has the highest survival rate for TBM globally – at over 96% – children are often admitted too late to change their condition, says Solomons. While they are likely to survive, their chances of a normal, healthy life are dashed. Children aged two to four are particularly at risk. Once TB has spread to the brain, it can result in permanent disability, such as cerebral palsy, epilepsy, severe behaviour problems and blindness, says Solomons.*

#### **Just a few droplets**

*"It only takes a few droplets of a sneeze or cough for TB to spread from an adult to a child. TB will first go to the lungs and then spread to the brain, causing TB meningitis." Solomons' research has shown that chest X-rays do not necessarily detect TB. Less than half of the 84 TBM patients in his study had a chest X-ray detecting TB. "If the chest X-ray is normal, be vigilant, because it doesn't necessarily mean there's no TB," suggests Solomons. A lower concentration of cerebrospinal fluid glucose distinguishes TBM from the less dangerous viral meningitis. His research also showed that measuring blood glucose at the same time could improve a diagnosis*

#### **Clinics not picking up on TB diagnosis**

*Solomons says the first and most important step is for parents, caregivers, doctors and nurses to be aware of the warning signs of TBM. This can be difficult as the symptoms can often be similar to flu. But Solomons says persistent symptoms should raise concern. "If a child has a persistent cough, night sweats, vomiting, poor appetite and if they've lost weight, TBM could be an option. It's also very*

important to ask if a child has come into contact with an adult with TB. TBM symptoms tend to be longer than five days.” Solomons is concerned that clinics are not picking up on a TB diagnosis.

### **TB: get tested**

“Children with TBM tend to have three or four contacts with health professionals before they come to me. There are many lost opportunities at the clinic. The thing that is often missed in clinics is when children present with vomiting, and no diarrhoea. “Sometimes it’s misdiagnosed as gastro, but you can’t have gastro with only vomiting and no diarrhoea. If a child has persistent vomiting, it could be a sign that there’s raised pressure in the brain somewhere and that should make you worried.”

### **Sudden coma**

A child diagnosed with TB will be put on a six-month treatment of a combination of four different drugs. If not treated, decline can be sudden and shocking. “It’s heartbreaking to see children that were healthy a few months earlier have permanent neurological disabilities,” says Solomons. “The parents come in and are totally in shock. Their child could be ill for a while, but still playing and talking to them, and then all of a sudden are lying there comatose. It often takes a few sit-down sessions with the parents for the news to sink in.”

### **Coma and persistent vegetative state**

From then on, children often require intense care, including physiotherapy, occupational therapy, wheelchairs and other aids.

### **Raising awareness**

Tygerberg Children’s Hospital is a tremendous support for children with TBM. They often stay at the hospital for a month before going home. The children follow up monthly at hospital until treatment is completed. “The hospital is very caring and is a lifeline for many families,” says Solomons. Solomons hopes for a world where ultimately people will not have to face the risk of TBM.

**Health 24 insert dated June, 2016. Kim Cloete. Department of Paediatrics and Child Health, Faculty of Medicine and Health Sciences, Stellenbosch University.**

## **Take the full course of treatment!!!**

Only a full course of treatment can fully clear TB bacteria from the body. If you do not take the full treatment then the following problems often occur:

- You may remain infectious to other people.
- You may not be cured.
- Even if you are feeling better, but TB bacteria may stay in your body, and go on to develop resistance, so you will develop DR TB which is very difficult to treat.
- Medicines given to people with TB disease usually stop them from spreading TB bacteria within a few weeks. Most TB patients live at home and can continue normal activities if they take their medicine. TB of the lungs means that you are probably infectious and should stay home, our doctor will tell you when you can return to work. When you are no longer infectious or feeling sick, you can resume normal activities, but you must continue to take your medication for the prescribed time.
- Hospitalization may be advised to prevent spread of bacteria until the infectious period is over, usually two to four weeks after starting therapy. Once treatment has started,

the amount of coughing is reduced and results in fewer TB germs in droplet. Coughing into a tissue and properly dispose the contaminated tissue also reduce the number of droplet generated during early treatment, thus reducing infectivity.

- It takes at least six months for the medicine to kill the bacteria. You will probably start feeling well after only a few weeks of treatment, but it is VERY important that you take the medicine regularly, and take it for the full six months even though you have no symptoms. Otherwise, the bacteria will regrow, and may also become resistant to the drugs. If this happens, you will need new, different drugs, which must be taken for longer and usually have more serious side effects. If you become infectious again, you could give bacteria to others.

The treatment for pulmonary tuberculosis could take up to a year and you will probably be asked to take an antibiotic every day. At the same time, good nutrition is a very important aspect of pulmonary tuberculosis treatment, as it can help your body fight off the bacteria. Being underweight or malnourished could cause you to become more susceptible to a relapse. Therefore, it is absolutely essential for you to get the right nutrition.

Make sure that your body gets an **adequate amount of vitamins and minerals**, along with other nutrients in order to regain your strength and stamina. Given below are some of the healthy foods to include in a pulmonary tuberculosis diet:

- Whole grains, especially whole wheat pasta, brown rice, whole wheat bread and breakfast cereals.
- Brightly colored vegetables that are rich in antioxidants, such as carrots, squash, sweet potatoes, peppers and tomatoes.
- Dark, leafy greens, like spinach, broccoli and kale.
- Fruits that are high in vitamins and antioxidants, especially oranges, lemons, melons, grapefruit, berries, pumpkins and cherries.
- Fatty fish varieties that are high in omega-3 fatty acids, which include herring, halibut, albacore tuna, sardines, salmon, flounder and mackerel.
- Dairy products like skim milk and plain yogurt and low-fat cheese.
- Unsaturated fats such as olive oil.
- Iron-rich sources of food, which include eggs (especially the yolk), meat, poultry, nuts and beans.

### ***Foods to avoid***

Just like some foods are good for a speedy recovery in pulmonary tuberculosis, there are other foods that may worsen the condition. Given below is a list of foods to avoid while undergoing treatment for pulmonary tuberculosis:

- ✓ Aerated drinks and packaged juices (with preservatives)
- ✓ Alcohol
- ✓ Black coffee and other caffeinated beverages
- ✓ Cured and processed meats like bacon, sausage and ham
- ✓ Red meat varieties like pork, beef, veal, venison and lamb

- ✓ Refined and processed foods like white bread, regular rice, crackers, biscuits, puffs, pastries and so on
- ✓ Sweets and sugary items like cakes, pies, chocolate and candies
- ✓ While getting treated for pulmonary tuberculosis, it is essential for you to skip tobacco completely, in all forms.

It is also advisable that you speak with your doctor before eliminating any foods from your diet.

### **Side Effects of TB Treatment**

Most of the medicines for treatment of chronic illnesses have side effects. Upon receiving treatment, patients are informed about the minor and major side effects. The clinical monitoring of all TB patients for side effects during treatment is important. Educating the patients and their families on how to recognise the symptoms of the common side effects and to report them immediately when they develop is very important during treatment. According to the TB treatment guidelines of Dept. of Health in South Africa, the patients must be asked about the following symptoms at every follow up visit;

#### **Minor:**

- ✓ Anorexia, nausea, abdominal pains
- ✓ Joint pains
- ✓ Burning, numbness and tingling sensation in feet
- ✓ Orange/ red coloured urine

#### **Major:**

- ✓ Skin rash with/ without itching
- ✓ Deafness (no wax on otoscopy)
- ✓ Dizziness (vertigo, nystagmus)
- ✓ Jaundice (other causes excluded)
- ✓ Vomiting, confusion
- ✓ Visual impairment/ loss
- ✓ Generalised purpura, shock

### **What is TB/DOTS? (Directly Observed Treatment)**

Most TB patients start to feel better after a few weeks of medication and are often tempted to stop taking it. Research shows that the biggest obstacle to curing TB is adherence. This happens when the patient fails to complete their treatment. Non-adherence had been associated with a variety of challenges mentioned above including the distance from a clinic.

It has been observed that the role of Directly Observed Treatment, Short-course (DOTS) as a strategy used by primary health services to detect and cure TB patients is very important in TB care and management. DOTS aim to ensure that patients take TB medicine under – either under the watch of the nurse at the clinic, or observed by a community worker closer to home. However, the study conducted by Soul City in Western Cape showed that DOT supporters also reported that people will refuse help for fear of being identified by the community as sick.

**The patient has a duty to:**

- Take their tablets as prescribed
- Report side-effects to the treatment supporter or clinic nurse
- Return to the clinic for scheduled visits
- Bring sputum specimens to the clinic for testing at the required times
- Provide feedback to the team of any problems that they experience
- Inform treatment supporter and clinic staff if they are going away and make plans for taking medication whilst away
- Take responsibility for completing their treatment

**The treatment supporter has a duty to:**

- Provide emotional support to the patient
- Encourage/remind patient to take their tablets daily
- Supervise treatment on the weekends, or daily if required, and record doses
- Remind patient to bring sputum specimens to the clinic for testing at the required times
- Motivate patient to complete the full course of treatment
- Report problems to the clinic

**Factors that Influence Treatment Outcomes**

Patients often take their TB medications under very difficult conditions and that they cannot control many of the factors that prevent them from taking their drugs. Although current efforts to improve adherence to tuberculosis treatments emphasise instilling into patients a willingness to take their medications, more must be done to address factors such as poverty and gender affect treatment adherence and to tailor support systems to patients' needs.

**Community Activism**

Recent studies confirm that knowledge of communities in TB is lacking and there is big need to provide communities with information that will enable them to take charge of their health and lives with TB disease. While educating communities on the disease, health activists and committee members can initiate or join other organisation campaigns such as below to mobilise organisations to work in partnership to beat TB.

- Partnership on health issues
- coordinate recourses and
- mobilise communities to participate and send strong messages across.

An informed community is resourceful community; organisation pledged to support and partner for fighting TB, and called on government support and investment in TB programmes; see below:

**World TB Day Memorandum - A Call to Action 24 March, 2009**

Work in partnership to save lives: Increase access to TB prevention, diagnosis, treatment and adherence support. We, as nongovernmental organisations, health workers and community care givers working to prevent and treat TB in our communities, are here today to show our commitment to increase our efforts and build partnerships to end the TB and HIV co-epidemics. We realized that we cannot

overcome this immense public health challenge alone and that commitment is needed from every individual, organisation and sector. As civil society, we will continue to mobilize communities and collaborate with government to increase access to TB/HIV services. In turn, we call on government to commit to invest more financial and human resources to address the dual TB and HIV epidemics in South Africa in partnership with civil society. Published by TAC under the [Creative Commons Attribution Share Alike 3.0 Unported license](#)

### Activity 5: Community Interventions

30 minutes

Method: Group Work

Review the list below and identify activities that can be planned in your community;

- Identify a target group
  - Method of intervention (e.g. training workshop, community event)
  - Develop an implementation plan.
1. Ensure the treatment service is respectful of patients to promote adherence. If Patients are treated badly or disrespectfully, they will not come back for treatment.
  2. Monitor the services – ensure no medicine stock-outs, ensure proper infection control, good diagnostic services with quick results.
  3. Collaborate with local organisations to advocate to address the Social Determinants that increase risk for TB – challenge overcrowding, lack of jobs, etc.; also work with local housing department and town planning authorities; environmental health authorities.
  4. Negotiate between the community and services, identifying health concerns and promoting community dialogues.
  5. Help patients who have stopped treatment or been lost to follow up are restored on treatment.
  6. Make sure that Home-based care workers and CHWs are properly supported to visit and assist TB patients
  7. Ask the clinic for its TB statistics; compare to previous months and years; find out if things are improving or getting worse – and what plans are in place to improve treatment outcomes.
  8. Develop an updated database of functional organisations in their areas to facilitate infection control and fast community actions.
  9. Manage the burden of disease through disease prevention, health promotion, and early detection of disease, treatment and rehabilitation – i.e. the provision of comprehensive health services.
  10. Negotiate for increase in personnel working in TB, e.g. more professional nurses and DOTS supporters

## Sexually Transmitted Infections, HIV/AIDS and Reproductive Health

### History of HIV/Aids

- The history and origin of Aids is not known.
- There are two schools of thought.
  - a. Aids was transferred from primates to humans.
  - b. Aids was developed in a laboratory and tested with certain population groups.

### Did you know?

- Aids has to get into your blood stream in order to multiply.
- HiV is predominantly transmitted by sexual intercourse.
- Flu Vaccines sent to Africa was once considered a source of infection
- The safest way to avoid contracting Aids once sexually active, is by practicing safe sex (use of condom).

### What is Aids?

HIV is a virus that destroys your immune system and can lead to AIDS. AIDS is a late stage condition that is caused by HIV infection. AIDS is considered the final stage of HIV.

Symptoms for HIV and AIDs are different for each person, because the symptoms of each condition come from opportunistic infections that set in during the Aids stage.

You can have an HIV infection without acquiring AIDS. Because of the quality of treatment available, many people with HIV live for years without developing AIDS.

There are three stages of HIV infection with different possible effects.

**1. First Stage:** HIV usually causes flu-like symptoms about two to four weeks after infection. The symptoms include: It is therefore difficult for most people to know right away that they've been infected with HIV. This is because when infection happens, the immune system puts up a fight to destroy HIV within 2 to 6 weeks after being infected by HIV. This remains a very infectious stage

**2. Second Stage: Chronic HIV Infection:** After your immune system loses the battle with HIV, the flu-like symptoms will go away. Doctors may call this the asymptomatic or clinical latent period. Most people don't have symptoms you can see or feel, but can still pass HIV on to others. This stage can last 10 years or more. During this time, untreated HIV will be killing CD4 T-cells and destroying your immune system.

**3. Third Stage: AIDS:** AIDS is the advanced stage of HIV infection. This is usually when your CD4 T-cell number drops below 200. You can also be diagnosed with AIDS if you have an "AIDS defining illness" such as Kaposi's sarcoma (a form of skin cancer) or pneumocystis pneumonia (a lung disease). When immune system damage is severe, people experience opportunistic



infections (OIs), they are called "opportunistic" because they are caused by things which our immune systems can usually defend against.

### **Signs and Symptoms**

- Being tired all of the time
- Swollen lymph nodes in your neck or groin
- Fever that lasts for more than 10 days
- Night sweats
- Unexplained weight loss
- Purplish spots on your skin that don't go away
- Shortness of breath
- Severe, long-lasting diarrhea
- Yeast infections in your mouth, throat, or vagina
- Bruises or bleeding you can't explain

### **HIV in S.A.**

South Africa has the biggest number of people living with HIV epidemic in the world. It is estimated that about 7 million people were living with HIV and AIDS by the year 2015. In the same year, 380,000 new infections were recorded while 180,000 South Africans died from AIDS-related illnesses (UNAIDS; Gap Report, 2016). This is despite that South Africa has the largest antiretroviral treatment (ART) programme globally that is largely financed from its own domestic resources. The HIV and AIDS infections in South Africa varies between regions, with Kwazulu Natal being the highest region with HIV infections (33%), compared with Northern Cape (18%) and Western Cape (8%).

### **Globally**

36.7 million people were living with HIV at the end of 2015. Sub-Saharan Africa remains most severely affected, with nearly 1 in every 25 adults (4.4%) living with HIV and accounting for nearly 70% of the people living with HIV worldwide.

### **Risk Factors**

- Unprotected sex
- Multiple partners
- Rape and sexual coercion
- Survival sex, where the person has less chance for negotiating safe sex
- Having a STI, especially STIs that cause open sores or ulcers such as herpes or syphilis
- People who frequently receive blood products (this risk is now very much diminished, but there are still countries where blood is not adequately screened)
- Health care workers, where precautions are neglected or fail (for example through not wearing gloves or accidental needle injuries and
- Babies of mothers who are HIV infected
- Drug usage through sharing needles

## **Sexually Transmitted infections**

Many STI's do not have signs. This is why it is transmitted so rapidly. Some signs include;

- Itching and/or burning in the genital area when you urinate.
- Sores or blisters that appear on the genital area.
- A bad smell.
- A discharge or drip from the genitals that may have an odour.
- Discoloured discharge.

### **1. Genital Warts**

Although safe sex does not completely prevent transmission of the **Human PapillomaVirus (HPV)** or genital warts, it reduces the risk. HPV can be transmitted through skin to skin contact.

Condoms will not completely protect you from genital warts if they appear in the area not covered by the condom. A condom should be used on the penis during sex. Limiting your sexual partners and avoiding sex with high-risk partners can reduce your risk of spreading the disease. When discussing sex with your partner, encourage honesty about sexual history and any medical conditions.

If your partner is infected with HPV (genital warts) or another STD, talk with your physician before beginning or continuing a sexual relationship. Learn the risks of transmission for all STD's and discuss methods for reducing your risk and your partner's risk of contracting the disease.

If genital warts appear on you or your partner, you should abstain from sex and seek appropriate treatment from your doctor. Although many types of HPV infections disappear on their own, you cannot predict if your genital warts will go away or continue to grow. It is better to have the condition treated than risk further complications. Seek medical attention from your nearest clinic.

If you have an outbreak of genital warts, you will be reminded that the virus will always be present. Remember that genital HPV is a highly manageable condition. Proper precautions and treatment can cause less disruption in your daily life. Most forms of HPV do not have serious consequences for women. In rare cases, though, some genital HPVs can lead to the development of cervical cancer. Persistent infection with high-risk types of HPV is the primary risk factor for cervical cancer.

Regular gynecological examinations and Pap testing can help ensure that any abnormalities do not progress to cancer. In some cases, your physician may recommend additional testing or treatment. It is important that you follow all of the recommendations to remain healthy and free of further complications from the virus. Your physician can also tell you if you are eligible for the HPV vaccine, which can prevent four common strains of HPV. **HPV/Genital Warts: Fast Facts.**  
**Reviewed By: Timothy Yarboro. M.D.**

### **Did you Know?**

At least 50 percent of sexually active men and women acquire genital HPV at some point in their lives. Most HPV infections have no symptoms and therefore, most people do not know they are infected. The virus can be transmitted to another person even if there are no symptoms.

- There is no cure for HPV and it remains in your system for life. However, most people do not require treatment, because the body's immune system controls the virus. Less than one percent of patients with HPV infection develop problems, according to the National Women's Health Resource Center.

## **2. Chlamydia**

Chlamydia is a common sexually transmitted disease (STD) caused by a bacterium called *Chlamydia trachomatis*. If left untreated, it can cause numerous medical problems, including serious damage to the reproductive organs.

Both women and men are affected, although there are far more reported cases of chlamydia in women than in men. It is transmitted through vaginal, anal and oral sex, but can also be passed from an infected mother to a newborn during vaginal childbirth. Younger men and women and those with multiple sexual partners are among those at a higher risk for chlamydia infection.

Most people with chlamydia do not usually have any symptoms. When they are present, signs and symptoms may include discharge from the vagina or penis, genital itching and lower abdominal pain. Because of the similarity in their symptoms, chlamydia is often mistaken for gonorrhea.

Chlamydia can be diagnosed through a urine test and by analyzing a fluid sample collected from the cervix or penis. The condition is easily treated with antibiotics. If left untreated, women with chlamydia may develop a serious infection of the uterus, fallopian tubes and other reproductive organs known as pelvic inflammatory disease (PID). In men, chlamydia can lead to a painful disease called *epididymitis*, which causes the testicles to swell. Both of these complications can lead to infertility.

## **3. Genital Herpes**

Genital herpes is mostly caused by a virus called herpes simplex 2 (HSV-2). In rare cases, it can also be caused by herpes simplex 1 (HSV-1), which is the same virus that causes cold sores and fever blisters.

Genital herpes is spread through sexual contact (vaginal, oral or anal) with an infected partner. It can be spread even if the infected person is not experiencing symptoms. Many people with genital herpes experience no symptoms. When present, early symptoms include itching or burning in the genital or anal area and flu-like symptoms. Later symptoms include blisters or sores and in women, vaginal discharge.

There is no cure for herpes because the herpes simplex virus remains in an individual's body for life. However, antiviral medications can ease symptoms, reduce the number of outbreaks and help prevent transmission of the virus.

Using a latex condom during sex can help reduce the risk of spreading the virus. However, herpes sores can occur in areas not protected by condoms. People with herpes should refrain from sexual activity during an outbreak.

#### **4. Bacterial Vaginosis Fact Sheet**

Bacterial vaginosis (BV) is a very common bacterial infection of the vagina.

**How do you get bacterial vaginosis?** Bacterial vaginosis is caused by increased production of bacteria in the vagina and is spread through vaginal sex.

**Can you protect yourself from bacterial vaginosis?** Yes. The best ways to avoid bacterial vaginosis are: No sex (abstinence), No drugs, (including alcohol), which can impair your judgment.

**What are the symptoms of bacterial vaginosis?** Fifty percent of women have no symptoms. When symptoms are present, they may include: Discharge from the vagina, odor from the vagina, burning or itching in or around the vagina.

**How do you treat bacterial vaginosis?**  
Antibiotics are used to treat and cure bacterial vaginosis.

#### **5. Gonorrhea**

##### **What is gonorrhea?**

Gonorrhea is a sexually transmitted infection (STI) that infects both males and females.

##### **How do you get gonorrhea?**

Gonorrhea is spread: through sex, from mother to baby (during birth).

##### **Can you protect yourself from gonorrhea?**

Yes. The best ways to avoid gonorrhea are: No sex (abstinence), no drugs (including alcohol), which can impair your judgment.

If you are having sex: Limit your number of sex partners. One lifetime partner is best. Be sure that your partner is a) faithful and b) has no infection. C) Use a condom correctly each time you have sex. Remember, condoms are not 100% effective to prevent gonorrhea. Therefore always ensure that you know your partner's sexual history.

##### **What are the symptoms of gonorrhea?**

Most people have no symptoms. When symptoms are present, they will usually appear two to eight days after sex.

In both males and females symptoms may include:

- Painful pee-ing or bowel movements.
- Yellow or clear discharge from penis, vagina or anus.
- Sore throat (from oral sex).
- Itching in the genitals or anus.

Females may also have:

- Fever.
- Abnormal bleeding from the vagina.
- Stomach pain.

### **Is gonorrhoea dangerous?**

Yes. For newborns gonorrhoea may cause eye infections, which can lead to blindness. For teens and adults gonorrhoea can cause serious damage to the sex organs and may make them unable to have children.

### **How do you treat gonorrhoea?**

Antibiotics are used to treat and cure gonorrhoea.

### **How do you know you have gonorrhoea?**

All you need is a simple exam and lab test. Go to a clinic or see your doctor.

### **Can you still have sex?**

You should not have sex until:

- You have finished the medicine.
- The person/s you're having sex with has finished the medicine.

## **6. Hepatitis B**

### **Hepatitis B Fact Sheet**

Hepatitis B is a common, serious liver disease that is usually caused by a virus (HBV).

### **How do you get HBV?**

HBV is spread by contact with infected body fluids (blood, semen and vaginal fluids).

HBV is usually spread through: sex, sharing needles to inject any kind of drug, sharing needles for tattooing and/or piercing, sharing personal care items (razors, toothbrushes), mother to baby during birth, infected blood or blood products.

### **How can you tell if you have HBV?**

It may take six weeks to six months for symptoms to appear. Symptoms of HBV can vary from one person to another and include:

- Tiredness.
- Fever.

- Loss of appetite.
- Yellow eyes and skin (jaundice).
- Flu-like aches and chills.
- Dark urine.
- Nausea and stomach aches.
- Light-colored bowel movements.

Many people who are infected never have symptoms. You can't tell for sure if a person is infected by their appearance.

### **How long can an infected person spread the virus?**

Anyone with HBV can spread it to others:

- Before symptoms appear.
- For an unknown time after symptoms go away.
- Even if symptoms are not present. Some infected people suffer from a chronic infection (infected for a lifetime) and they:
  - Can infect others.
  - May have no symptoms, or just feel tired and weak.
  - May have severe liver problems, especially liver cancer.

### **How is HBV treated?**

Most people recover completely from HBV with proper care, rest and diet. However, there is no cure for HBV.

### **Can you protect yourself from HBV?**

Yes. The best ways to avoid HBV are:

- Never share needles to inject illegal drugs, inject medications (such as insulin), have a tattoo made or pierce a body part.
- Never share personal care items such as toothbrushes, razors, manicure items.
- No sex (abstinence).
- No drugs (including alcohol), which can impair your judgment.
- Get the HBV vaccine.

### **If you are having sex:**

- Use a latex condom every time you have vaginal, anal or oral sex. Remember, condoms are not 100% effective in preventing the transmission of HBV.
- Limit your number of sex partners. One lifetime partner is best.
- Take extra steps if you have HBV:
  - Do not donate blood, plasma, sperm (semen), organs or other body tissue.
  - Cover cuts, sores and any other breaks in your skin. An HBV vaccine is available that is safe and effective for everyone, including pregnant women and children. The vaccine is given in three doses (a series of three shots).
- You need to get all the shots to be fully protected.

### **Post-Exposure Prophylaxis (PEP). Prophylaxis: prevention**

PEP is a treatment taken soon after a person has been exposed to an HIV infective source in order to prevent an infection from occurring.

For instance if someone is exposed to the HI virus, either by having unprotected sex with someone who is HIV-positive or through certain types of contact with infected blood, then an immediate course of antiretroviral (ARV) drugs can be taken to prevent HIV disease from developing.

This treatment, which is called HIV PEP or PEP for short, must be taken for four weeks and will only be effective if it is started within 72 hours (three days) of the exposure. PEP, if taken correctly, appears to be at least 80% effective at preventing an infection from developing.

### **AIDSbuzz**

#### **Window Period**

Although it is essential to be tested for HIV immediately, there is generally a period, during which time the virus will not yet be picked up. This is called the 'window period'. It means that the person would have to be tested again after three months to make sure that the results are still negative. There have been cases where HIV infection was picked up after the three months. It is therefore recommended that another test be taken after 6 months.

This section provides information on the following:

- Situations where PEP is administered (including exposure in the workplace and due to rape)
- What happens after exposure?
- What does PEP involve?
- Additional treatments given to rape survivors

Situations where PEP is administered

#### 1) Exposure in the workplace.

Healthcare workers can be exposed to the HI virus when looking after HIV-positive people through the following situations:

- **Needle stick injuries.** These can accidentally occur when blood is being withdrawn or when injections are being given or drips set up. Infected blood can then pass directly from inside the needle (which is hollow) into the injured healthcare worker. The overall risk of contracting HIV through a needle stick injury is about 1 in 300. This means that for every 300 people who have needle-stick injuries only one will become HIV-positive. The risk is reduced if the injury occurs with a solid sharp object like a scalpel blade as the healthcare worker is usually exposed to smaller amounts of blood.
- **Exposure to infected fluids such as blood.** If infected blood is splashed into the eye or mouth, or comes into contact with skin that has cuts, abrasions or is damaged in any way, then the healthcare worker is at risk. This risk is less than with needle stick injuries.

Contact with body fluids such as saliva and urine do not pose a risk, as they contain insignificant quantities of the HI virus.

**Non-medical people can also be put at similar risk through accidental injury or exposure to blood when assisting at an accident in the workplace or on the road, for example.**

If any such exposure occurs and the HIV status of the person who is being treated or helped is positive or unknown, then medical advice must be sought immediately. PEP, if it is indicated, needs to be started as soon as possible and definitely within 72 hours of the exposure, to be effective.

The Department of Health has undertaken to provide PEP to all healthcare workers who are accidentally put at risk. They will usually be able to obtain treatment at the place where they work or they will be referred to an appropriate facility.

A non-medical person who believes he or she may have been exposed to HIV through an accident or work-related injury should request treatment at the nearest government HIV Service Point.

Phone the AIDS Helpline on 0800 012 322 to find out the nearest facility.

PEP can also be prescribed privately and will be covered by most medical aids.

## **2) Exposure due to rape.**

- The risk of contracting HIV disease through forced sexual acts, including both vaginal and anal sex, is high. It is commonly assumed that the risk is much greater than during consensual sex as forced sex is associated with greater trauma to the vagina or anus. If there is any tearing or damage the virus can get into the bloodstream more easily.
- The risk of HIV infection through oral sex is low. It is much lower than for other types of unprotected sexual activity, yet it is possible.
- PEP treatment should be started as soon as possible after rape, especially for children, and definitely within 72 hours of the incident.

There are over 50 000 reported cases of rape a year in South Africa, with 40% involving children under 14 years (Government Statistics 2004). The AIDS Law Commission estimates that the true extent of rape is much greater and that well over a million rapes are happening each year in South Africa. Given the extent of the HIV epidemic this means that rape is a significant cause of HIV infection. Widespread availability of PEP is therefore an important way to help reduce the infection rate and save lives.

The government has passed a law that guarantees all rape survivors' access to free PEP. However, this service is only available at the government health facilities where Antiretroviral Treatment (ART) is being provided (HIV Service Points), and some provinces are better served than others. This means that some rape survivors will not be able to access treatment within the necessary 72-hour period.



As the government's capacity to provide ART increases for both adults and children, PEP access for rape survivors will also increase. This is especially important with regard to children. Nearly half of rape survivors are under the age of 12 years but many of the HIV Service Points do not yet provide ART for children.

It is important to remember that a rape survivor does not need to lay a charge of rape in order to receive PEP.

Phone the AIDS Helpline on 0800 012 322 to find out the nearest government HIV Service Point. If the rape involves a child remember to check that the facility offers PEP for children.

Rape survivors can get help from a number of organizations. Here are some numbers.

Powa: 011 642 4345

Rape Crisis: (021) 447-1467

The website [www.speakout.org.za](http://www.speakout.org.za) offers extensive advice for rape survivors, as well as a list of all PEP sites throughout the different provinces.

### **Rape has become a sickening way of life in our land.**

September 26, 2004 Edition 1. **Charlene Smith**

*"Police reported this week that they were achieving success in combating most crimes, but not rape. Jackie Selebi, the national police commissioner, said there were 115,3 cases per 100 000 people in 1994, compared with 113,7 in 2003/04.*

*Selebi said rape statistics might be exaggerated because many rape cases were reported on a Friday and Saturday night, only to be withdrawn on a Monday.*

*It's the withdrawal of cases that bears closer examination, because it says nothing about women "lying" about rape as the ignorant might believe, but it says everything about a society that fails women and children and is allowing HIV/Aids to proliferate without check.*

*According to Interpol, South Africa has the highest rates of rape in the world and the highest incidence of HIV. The National Prosecuting Authority tells us that 50 percent of all cases before South African courts are for rape, except in Durban and Mdantsane, where it is 60 percent.*

*Although the Law Reform Commission estimates there are 1,7 million rapes a year, on average only 54 000 rape survivors lay charges each year. Why? It is because rape survivors are treated so badly by so many.*

*A Medical Research Council study into conditions for rape survivors in Gauteng in 2002 found that the treatment of survivors by police and medical and court personnel was deplorable. Two researchers were so traumatised by what they witnessed that they had to go for counseling.*

*The Medical Research Council reported that "26 percent of doctors and nurses who treated rape cases didn't think them a serious medical problem". Yet rape carries the risk of sexually transmitted diseases (STDs), including HIV, a range of other infections, pregnancy and long-term psychological scarring.*

### **What Happens After Exposure?**

- HIV tests will be performed on all people before commencing PEP, with their permission. They will also receive pre-and post-test counseling. If a person refuses an HIV test, PEP will not be provided. People who are either known to be HIV-positive or found to be HIV-positive will not be offered PEP. They will be counseled and referred to an appropriate health facility for long-term management. If the person is HIV-negative treatment will be started immediately.
- If a rapid HIV test is not available people will be started on PEP with a three-day starter pack. If the results come back positive the treatment will be discontinued and the person will be given appropriate advice. If the person is HIV-negative the full course of the treatment will then be provided.

The health professionals and counselors who conduct and discuss the HIV test are bound, by law, to keep the results strictly confidential. Other people, such as families or friends, will only be told of the results with the person's permission.

### **What does PEP involve?**

- PEP is a four-week programme of antiretroviral medication that must be taken several times a day. The drugs can have unpleasant side effects such as nausea, headaches, fatigue, skin rashes, vomiting and diarrhea. These side effects are not serious and usually do not last long. If they become difficult to cope with, a doctor should be consulted.
- PEP is not 100% effective but becomes even less effective if doses are missed or if the full four-week programme is not finished. It is important that a friend or family member support the rape survivor during treatment and make sure that the medication is taken properly for the full four weeks. Post-traumatic stress resulting from a rape can affect the person's ability to take medication reliably.
- People receiving PEP should ideally be seen after one week and then again at six weeks, three months and six months after the exposure. HIV testing should be performed at the six-week, three-month and six-month visits. If the person is still negative after six months they can know for sure that they have not contracted HIV disease as a result of the exposure.

### **Additional treatments given to rape survivors**

- Antibiotic treatments to prevent other sexually transmitted infections like venereal disease.
- The 'morning after' pill to prevent pregnancy.

Rape is very traumatic and rape survivors need both professional support and the support of families and friends. Rape survivors also have the right to be treated with respect and dignity at all times by the doctors, nurses, police officers, prosecutors and social workers who help them after the rape.

## MENTAL HEALTH

### WHAT IS MENTAL HEALTH

Mental health is a circumstance of psychological welfare in which a person understands his capabilities and possesses adequate coping mechanisms for everyday stress. Mental health also means working in a productive manner and contributing to one's community

### ANXIETY DISORDER

A mental health disorder characterised by feelings of worry, anxiety or fear that are strong enough to interfere with one's daily activities.

Examples of anxiety disorders include panic attacks, obsessive-compulsive disorder and post-traumatic stress disorder.

Symptoms include stress that's out of proportion to the impact of the event, inability to set aside a worry and restlessness.

Treatment includes counselling or medication, including antidepressants.

Most people experience anxiety from time to time. Anxiety **disorders** are different, though. They can cause such distress that it interferes with your ability to lead a normal life. This type of **disorder** is a serious **mental illness**. For people who have one, worry and fear are constant and overwhelming, and can be disabling.

### Major types of disorders are:

- **Depression**  
The symptoms of depression include poor concentration, fatigue, irritability, feelings of hopelessness, loss of appetite, overeating, decreased interest in activities, headaches, sad feelings, insomnia, feelings of guilt. Severe depression will result in the person being curled up in bed, not wanting to face the world.
- **Generalized Anxiety Disorder.**  
Generalized **anxiety** disorder (GAD) is a common **anxiety** disorder that involves **chronic** worrying, nervousness, and tension. ... You go about your activities filled with exaggerated worry and tension, even when there is little or nothing to provoke them.
- **Obsessive-Compulsive Disorder (OCD)**  
Repetitive behaviour based on irrational fears e.g. excessive hand washing.
- **Panic Disorder.**  
Panic disorder is an anxiety disorder characterized by recurrent unexpected panic attacks. Panic attacks are sudden periods of intense fear.
- **Post-Traumatic Stress Disorder (PTSD)**  
**PTSD** is a disorder that develops in some people who have experienced a shocking, scary, or dangerous event.
- **Social Phobia (or Social Anxiety Disorder)**

For people with social anxiety disorder, everyday social interactions cause irrational anxiety, fear, self-consciousness and embarrassment. Symptoms may include excessive fear of situations in which one may be judged, worry about embarrassment or humiliation or concern about offending someone.

- **Bipolar**

Bipolar disorder is characterized by alternating periods of manic symptoms, such as euphoria, poor judgment, racing thoughts and high self-esteem, and depressive symptoms, such as hopelessness, suicidal thoughts or behaviors, guilt, anxiety and fatigue.

- **Paranoid Schizophrenia**

Schizophrenia is a kind of psychosis, which means your mind doesn't agree with reality. These people suffer from a constant sense of persecution. It affects how they think and behave. This can show up in different ways and at different times, even in the same person. The illness usually starts in late adolescence or young adulthood. People with paranoid delusions are unreasonably suspicious of others. This can make it hard for them to hold a job, run errands, have friendships, maintain relationships and even go to the doctor. Although it's a lifelong illness, you can take medicines and find help to stop symptoms or make them easier to live with.

### **Paranoid Symptoms**

Delusions are beliefs that seem real to them, even when there's strong evidence they aren't. Paranoid delusions, also called delusions of persecution, are rooted in fear and anxiety. They might make you feel like:

- A co-worker is trying to hurt you, like poison your food.
- Their family is being mean to them.
- The government is spying on them.
- People in the neighborhood are plotting to harass them.

These beliefs can cause trouble in relationships. And if they think that strangers are going to hurt them, they may feel like staying inside or being alone. People with schizophrenia aren't usually violent. But sometimes, paranoid delusions can make them feel threatened and angry. If someone is pushed over the edge, their actions usually focus on family members, not the public, and it happens at home. They could also have related hallucinations, in which your senses aren't working right. For example, they may hear voices that make fun of them or insult the people around them. The voices might also tell them to do self-destructive or harmful things. Or they might see things that aren't really there.

### **MENTAL HEALTH TREATMENT PLAN**

To create a mental health treatment plan, a person should speak to a health care provider to form a plan based on the type of mental illness that needs to be treated, its severity, and the individual's personal needs and preferences

To treat mental health problems, doctors may prescribe antidepressants, anti-anxiety medications, mood stabilizing medications and antipsychotic medications. While one health care provider may be able to meet the treatment needs of an individual with a mild mental health condition, those with more severe mental illnesses may require the assistance of a treatment team

### **What can communities do?**

1. Promote awareness in the community and reduce stigma.
2. Ensure the treatment service is respectful of patients. (If Patients are treated badly or disrespectfully, they will not come back for treatment.)
3. Monitor the services – ensure no medicine stock-outs, ensure proper infection control, good diagnostic services with quick results.
4. Advocate to address the social determinants that increase the risk for rape, reproductive health, HIV/Aids, violence, diabetes etc. – and challenge marketing of unhealthy foods, lack of recreational facilities, etc.
5. Negotiate between the community and services.
6. Help patients who have stopped treatment or been lost to follow up are restored on treatment.
7. Make sure that Home-based care workers(HBC) and Community health workers (CHWs) are properly supported to visit and assist chronically ill patients.
8. Ask the clinic for chronic illness statistics; compare these to previous months and years; find out if things are improving or getting worse – and what plans are in place to improve treatment outcomes.
9. Review the Chronic Disease Audit.

## EVALUATION

### OUTCOME

1. To get feedback on the value of the training.
2. To establish whether the training met the need of participants.
3. To establish possible content of follow-up workshops or training.

1. Write up what has been gained from this training course?

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2. Has the Monitoring and Evaluation information been helpful? YES NO. Explain.

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3. Has the Community Systems Strengthening model been useful? YES. NO. Explain.

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4. What did you like the most? The least?

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5. What else should be included in the training? Any other comments?

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6. Is the material useful?

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7. How will you use this learning in your work/community?

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8. What could be done better:

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**Alignment with NDoSD Request for a Model for Supporting Community Based Organisations:**  
CONSULTATIVE ROUNDTABLE DISCUSSIONS WITH NATIONAL Non-profit companies (NPC) AND RELATED STRUCTURES ON THE REVIEW OF THE WHITE PAPER ON SOCIAL WELFARE (of 1997)

Proposals for NPO National Directorate:

**NPOs and CBOs**

- I) NPC's needs to be on CIPCI data base.
- II) Government sets point system for capacitation.
- III) Mentoring role of big organisations: identify NPC's that can play a support role to CBOs.
- IV) Independent affiliates; subject to NPC standards. NPC develops a matrix that outlines 'services' provided and creates levels for assessment.
- V) CBOs to be renamed as social service practitioners; The community based organisations should have the ability to identify the service being provided to the community. (Health and Education enjoys better status than Social Development because they are providing services).
- VI) Services provided for treatment and support but also for prevention and early intervention.
- VII) Eliminates poverty and addresses progressive realisation of rights.

**National NPO Directorate**

- I) Mapping services according to need – national exercise. Developmental route covering the full range of deprivation, responding to different contexts.
- II) Acknowledgement of diversity and inclusion.
- III) Development of a data base.
- IV) Development of a new model in re-structuring and service innovation.
- V) Decentralisation of NPC registration – provincial competency.
- VI) New Welfare Act. New funding flow to CBOs and NPC's.
- VII) Review of White paper – leading to legislation.
- VIII) Develop a well-constructed proposal to treasury, regarding funding for the sector (NPOs and CBOs doing 'welfare' work. Cost implications of recommendations.
- IX) 'Social Services' to act as overarching definition.
- X) Redress and transformation in relation to apartheid consequences still need to be built into budgeting and policy formulation. We are still the apartheid generation and poor communities are carrying the burden of social dysfunction.

**Addresses White paper Challenges:**

1. Creation of self-sufficiency!
2. Create opportunities for growth.
3. Policies should push the most vulnerable and the poorest of the poor out of deprivation or helplessness to dignity.
4. Model can be replicated in any area of need or any sector.

## Acknowledgements

1. Healthcare 2030, The Road to Wellness, Western Cape Government Health, March 2014
2. International Diabetes Federation, 2015. <http://www.diabetesatlas.org>
3. <http://www.ncbi.nlm.nih.gov/pubmed/24357209>
4. <http://www.fulloflife.co.za/>
5. <http://www.health24.com/Medical/Diabetes/Who-is-at-risk/Do-you-have-prediabetes-20120721>
6. <http://mg.co.za/tag/service-delivery-protests>
7. The S.A. National Health Promotion Policy and Strategy, 2015 – 19, Department of Health
8. South Africa. Department of Health. Negotiated Service Delivery Agreement: Delivery agreement for outcome 2: A long and healthy life for all South Africans,. Pretoria National Department of Health; 2010.
9. <http://www.diabetes.org/diabetes-basics/gestational/what-is-gestationaldiabetes.html#sthash.ho04HXQW.dpuf>
10. Department of Health Statistics and Informatics, WHO. International Journal of Epidemiology, volume 43, issue 1, February 2014.



**TB Pre and Post Test**

1. Tuberculosis disease is when:

Tick as many options as you like: <b>Your lungs are infected with mycobacterium tuberculosis</b>	
<b>Your lungs are full of blood</b>	
<b>You feel thirsty and weak often</b>	
<b>Your blood sugar is high</b>	

2. Name two stages of TB development

- a) \_\_\_\_\_  
b) \_\_\_\_\_

3. Name three signs and symptoms of tuberculosis

- a) \_\_\_\_\_  
b) \_\_\_\_\_  
c) \_\_\_\_\_

4. Pulmonary TB is:

Tick as many options as you like

<b>Can be cured with appropriate treatment</b>	
<b>Is the TB of the lungs</b>	
<b>Can be spread by inhaling infected droplets in the air</b>	
<b>You can die from it</b>	

5. Answer True or False

5. HIV&AIDS infection lead to weak immune system which makes it easy for TB infection	True	False
6. TB and Diabetes can happen together	True	False
7. TB is spread by sharing bedlinen	True	False
8. If you have TB you should quit smoking and stop taking salt	True	False
9. Tuberculosis is not curable	True	False
10. Children and babies cannot get tuberculosis	True	False