

THE COST OF MEDICINE NON-ADHERENCE

PREPARED BY: BATHOBILE BEBELELE

AGENDA

- Is it “Compliance” or “Adherence” to treatment
- Patient journey leading to non-adherence
- Identify drivers on non-adherence in the South African context
- Quantify the clinical and economic burden both in private and public sector
- Recognize high-risk patients early
- Application of practical adherence interventions
- Improve patient outcomes while reducing healthcare costs

LET'S UN-PACK COMPLIANCE VS ADHERENCE

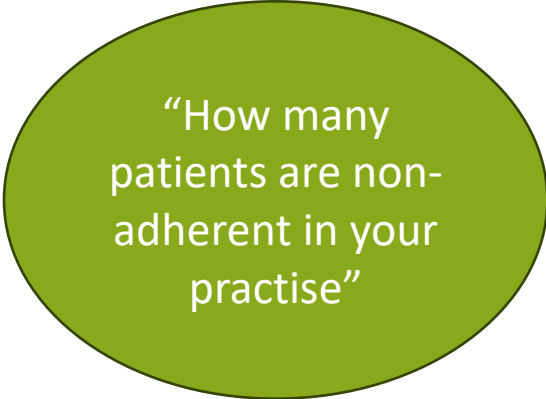
- Compliance implies that the healthcare provider gives instructions, and the patient is expected to follow them
- This does not recognize that there may be barriers that the patient encounter
 - Financial
 - Side effects of the medication
 - Lack of education/disease understanding
 - Access
 - Cultural/religious beliefs
 - Mental health issues
- Adherence is a collaborative effort where the patient participates in their treatment plan and acknowledges
 - Socio-economic factors
 - Health literacy
 - Healthcare systems
 - Treatment complexity
 - Healthcare worker communication

THE WORLD HEALTH ORGANIZATION DEFINITION OF ADHERENCE IS:

“The extent to which the person’s behavior corresponds with **agreed** recommendations from a healthcare provider”

WHY IS IT IMPORTANT TO TALK ABOUT MEDICINE NON-ADHERENCE?

- Medication non-adherence is one of the largest preventable causes of:
 - Treatment failure
 - Avoidable hospitalization/ emergency room visits
 - Disease progression
 - Drug resistance in infectious diseases
 - Healthcare expenditure
 - Premature mortality
- In South Africa, this problem is amplified by:
 - HIV/TB co-infection
 - High chronic disease prevalence
 - Poverty & transport barriers
 - Fragmented continuity of care
 - Public-private healthcare inequalities

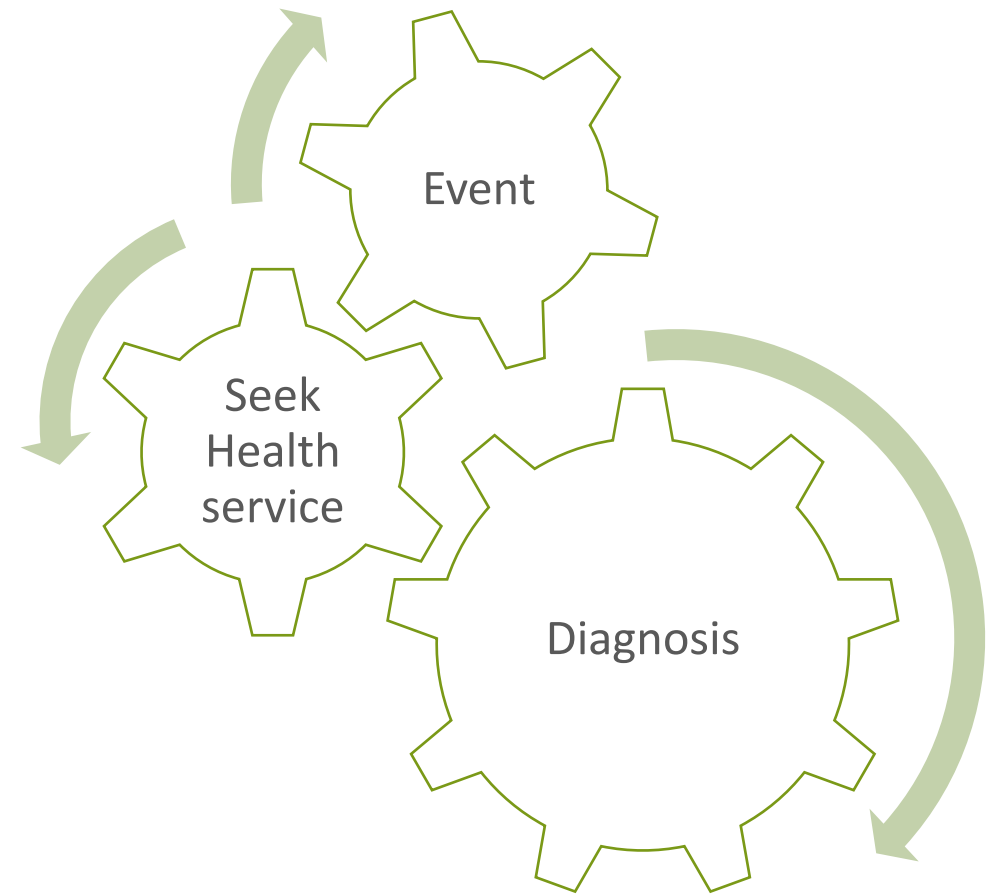


“How many patients are non-adherent in your practise”

THE PATIENT JOURNEY

A PATIENT

- Symptoms/Life event/Occupational requirement
- Health-seeking behavior
 - Self-Medication
 - Referral to another healthcare provider who can make a diagnosis
- Diagnosis
 - Treatment selection
 - Prescription issued
 - Medicine Initiation



SYMPTOM RECOGNITION

- Patient delay before presenting to healthcare professional
 - Financial constraints
 - Transport costs
 - Fear of diagnosis
 - Traditional medicine use
 - Long waiting times
 - Loss of income from clinic attendance
- Consequences
 - Advanced disease
 - Condition that is difficult to control
 - Disease progression involving other organs/systems

TREATMENT CHOICE

- Treatment decisions affects adherence
 - Regimen Complexity
 - Multiple daily doses
 - Large pill burden
 - Side Effects
 - Adverse effects
 - Treatment toxicity
 - Cost
 - Co-payments
 - Medical aid exclusions
 - Transport costs
 - Health literacy
 - Poor understanding of chronic disease
 - Asymptomatic illness misunderstood

SOUTH AFRICAN REALITY

Public Sector	Private Sector
Medication stockout	Medical aid limitations
Long waiting times	Co-payments
High patient volumes	Chronic medicine exclusions
Limited continuity of care	Specialist access costs



THE DRIVERS OF NON-ADHERENCE

DEFINITION

Non-initiation

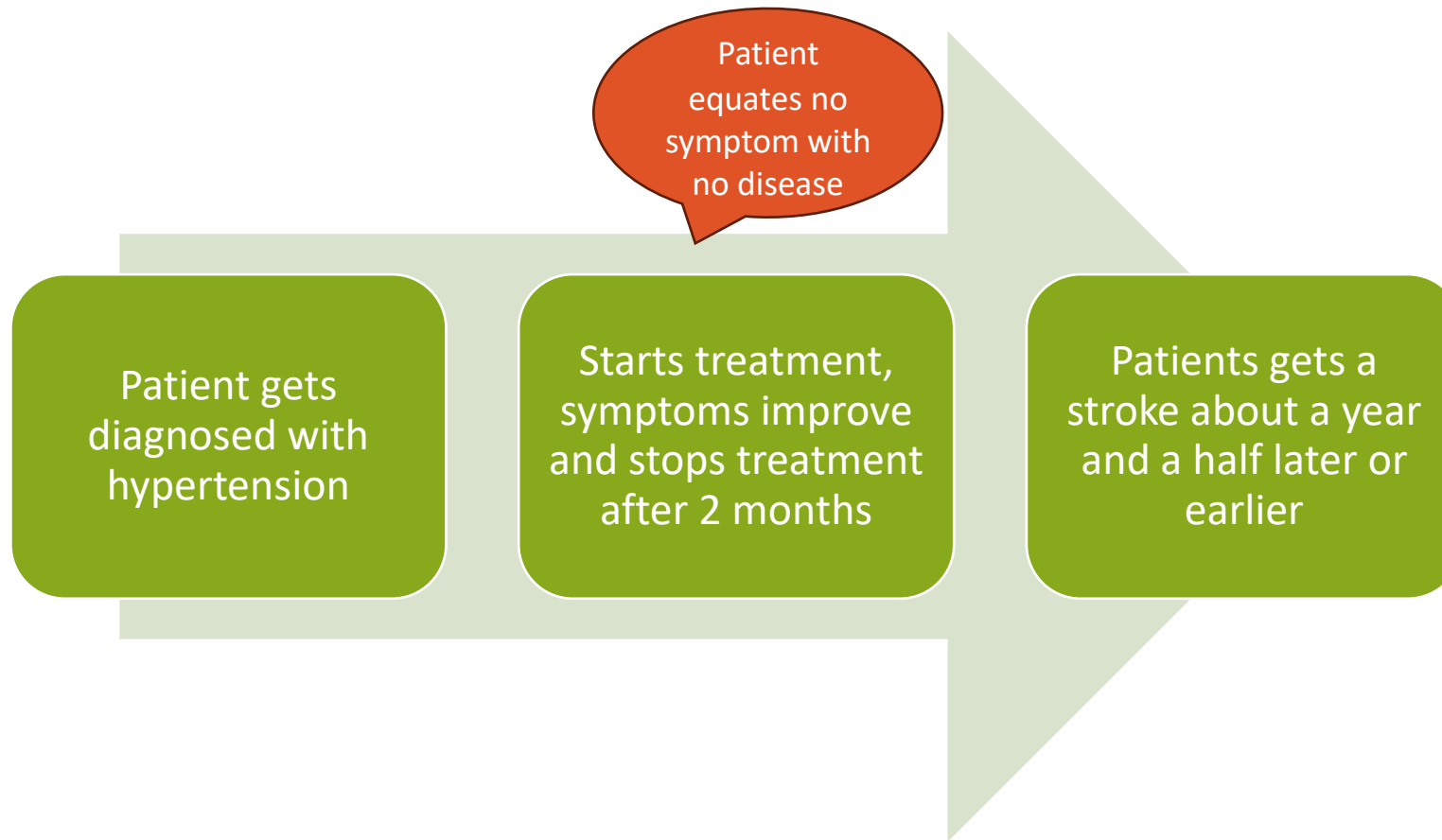
Poor implementation

Non-persistence

REASONS FOR NON-ADHERENCE

- Socio-economic
 - Poverty
 - Transport costs
 - Food insecurity
- Patient Factors
 - Mental health issues
 - Alcohol misuse
 - Low health literacy
 - Fear of side effects
- Health Systems Factors
 - Poor communication
 - Long queues
 - Medicine unavailability
- Therapy Factors
 - Pill burden
 - Complex regiment

THE HIDDEN COST OF FEELING BETTER



DISEASE SPECIFIC CONSEQUENCES

- Hypertension
 - Stroke
 - Heart Failure
 - Chronic Kidney Disease
- Diabetes
 - Diabetic Keto Acidosis
 - Amputations
 - Blindness
- HIV
 - Viral rebound
 - Opportunistic infections
 - Resistance
- Tuberculosis
 - Treatment failure
 - MDR/XDR-TB
 - Community spread

TB AND HIV

TB treatment requires extremely high adherence levels

- Poor adherence contributes to:
 - MDR-TB
 - XDR-TB
 - Increased mortality
 - Transmission within communities

Research in South Africa showed ART adherence was generally better than TB medication adherence, suggesting pill burden and regimen complexity influence outcomes.

ECONOMIC COSTS OF NON-ADHERENCE

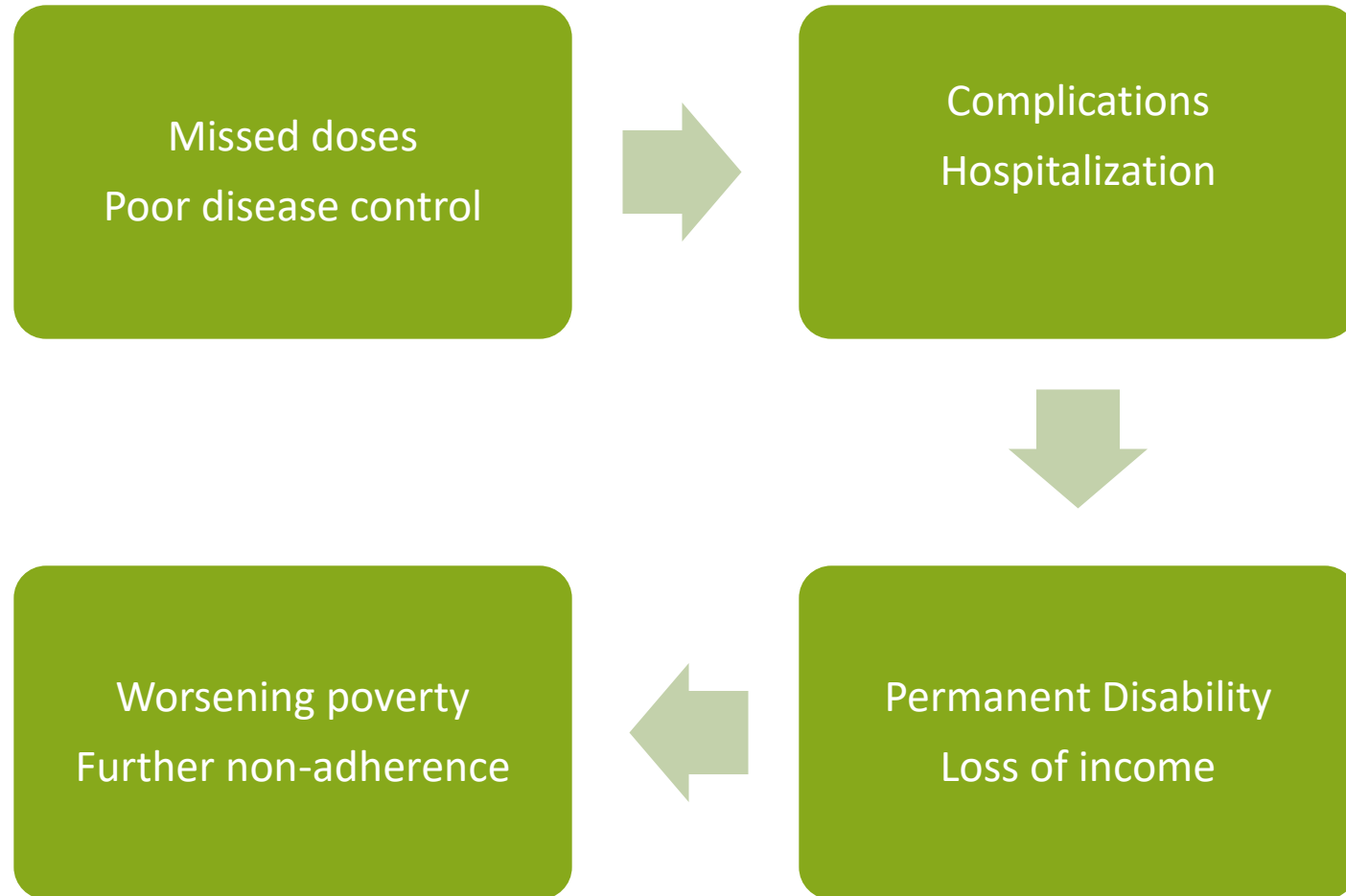
Direct Healthcare Costs

- Repeat consultations
- Additional investigations
- Hospital admissions
- ICU stays
- Dialysis
- Surgery

Indirect Costs

- Loss of productivity
- Disability grants
- Caregiver burden
- Premature mortality

THE COST CASCADE



WHY GENERAL PRACTITIONERS MATTER MOST

General practitioners influence:

- Trust
- Health literacy
- Treatment simplicity
- Follow-up behavior
- Continuity of care

Patients are more adherent when:

- They understand the condition
- They trust the clinician
- Regimens are simplified
- Follow-up is proactive

HIGH RISK PATIENTS AND PRACTICAL INTERVENTIONS

RED FLAGS FOR NON-ADHERENCE

- Missed appointments
- Poor disease control
- Frequent ER visits
- Alcohol misuse
- Depression
- Food insecurity
- Polypharmacy
- Financial stress

PRACTICAL ADHERENCE STRATEGIES

Simplify Regimens

- Once-daily dosing
- Fixed-dose combination

Improve Communication

- Teach-back method
- Avoid jargon

Build Trust

- Shared decision-making
- Non-judgmental approach

Use systems

- SMS Reminders
- Repeat prescription systems
- Chronic medicine delivery/collection programs

FUTURE OF ADHERENCE SUPPORT

Emerging Approaches

- Digital reminders
- Community health workers
- Pharmacy-based adherence support
- Decentralized medicine delivery
- AI-supported adherence monitoring

CONCLUSION

Medication non-adherence is

- Common
- Multifactorial
- Expensive
- Preventable

The burden affects:

- Patients and Families
- Healthcare systems
- National productivity

GPs remain central

Early intervention, Patient education, Simplified treatment, Long-term adherence