HOW TO SUCCEED IN A DISEASE WITH INCREASING RESISTANCE

Lessons from the MDR TB Program

DR I H Master

ARE THERE LESSONS FOR HIV ?

- Perception
  - HIV program is structured better than the TB
  - HIV may be doing a better job than the TB
  - HIV program has
    - More Funding
    - More Training and Knowledge and Expertise (HIV Diploma)
    - More Decentralization (Clinic Level + NIMART Program)
    - More HIV Specialists
    - More Structured A/E reporting

SHOULD WE IGNORE RESISTANCE ?

- Experts said treat TB well and you need not worry about MDR TB
  - This has been proven to be false
- While TB cure rates improve
  - MDR TB continues to rise
  - Primary MDRs increase daily

  We cannot ignore it!
- In the HIV program we are concentrating on roll out(like we did in TB) with minimal attention on resistance
  - A small pool of resistance could mushroom into a disaster in the future
  - **Like in TB, resistance in HIV cannot be ignored!**

REALITY

- The HIV program has not yet come to grips with problems of resistance whereas the TB program has.
- The TB program is facing its demons and has plans to tackle them

SO……

- What challenges has the MDR program faced ?
  - What have we got right? &
  - What are we still grappling with?
- Lessons can be learned in MDR successes and failures

EXAMPLE OF MDR TB SUCCESS

- Tugela Ferry had one of the worst MDR/XDR problems
- With key interventions they have turned around the situation
  - Improved infection control
  - Model decentralized program (injection teams)
  - Rapid diagnostics and dedicated doctors
  - Situational Analysis with specific targets
  - Strong treatment support
  - Focus on Both MDR & HIV programs - together
- **Outcomes for both the MDR and HIV programs are one of the best in the country!**
- **Cannot succeed focusing on HIV alone!**

RAPID DIAGNOSTICS

- MDR/XDR TB remained difficult to diagnose and quantify until the advent of LPA and Gene Xpert testing
- We are coming to grips with the extent of the problem
- Knowing a problem is key to resolving it
- The same goes for the HIV program

Consideration for cheaper and more widely available HIV resistance testing is required

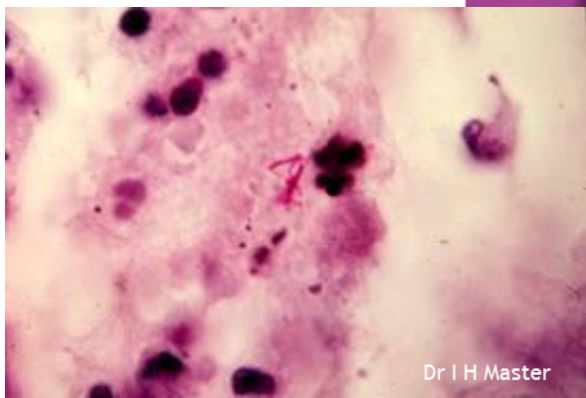
- **(will need training on interpretation)**

NEW DRUGS IN TB/HIV

- As the spectrum of available drugs for the MDR TB were extended – outcomes improved
  - Capreomycin/PAS/Moxifloxacin/Clofazimine
  - Bedaquiline/ Delaminid/ PA824/ Linezolid
- The HIV program needs affordable new drugs to be made available to handle the treatment failures and resistance that is emerging but as with MDR TB these need to be properly regulated and controlled

EVIL TWIN SISTERS – TB + HIV

- Both programs cannot work in isolation
- For TB program to succeed the HIV program needs to be successful and vice versa
- Every TB patient needs to be screened for HIV and every HIV patient needs to be screened for TB.
- HIV will only succeed
  - if it screens adequately for TB
  - If there is a well run IPT program



INTEGRATION OF HIV / TB PROGRAMS

- HIV and TB programs are often run in separate clinics
- There is duplication of Data recorded
- Wastage of Human resources
- Treatment of one program impacts on the other (drug interactions)
- At times in a TB clinic it is assumed that a patient
  - is on ARVs only to find subsequently that there was failure to start ARV's
  - or that the **other** program ordered the Bactrim when nothing was received
- It is wiser to work towards integration of services
  - Every Doctor/HCW should have capacity to treat HIV & TB

ENSURE PROPER FOLLOW UP

- Counsel on discharge
- Link with the clinic
  - Many patients initiated in hospital are lost on discharge
- Find a treatment supporter
- Ensure good adherence
- Have tracer teams to recover patients
- Educate & Screen Families
- Failure results in Default/ Resistance & poor outcomes
- The same principals should be practised with the HIV program

CORRECT DRUG AND DOSAGE

- Even experienced staff make errors in regimen & dosaging
  - Drugs appropriate for age
  - Consider drugs previously exposed to
  - Correctly written prescription and correctly dispensed with appropriate advice
  - Consider co-morbidities like renal/hepatic/diabetes
  - Review scripts and drug combinations monthly/regularly
  - Look at drug interactions and make appropriate switches
  - Appropriate decisions on when patients are failing treatment and requiring new regimens
- The incorrect drug or combination may
  - Promote the development of resistance and compromise future options.
  - Cause serious adverse events (eg TDF and aminoglycosides)

CAUSES OF POOR ADHERENCE -1

- Failure to Counsel Patients & family
  - A informed & supported patient is more compliant
  - A patient rushed on to therapy without adequate counselling and support is more likely to default treatment or develop resistance

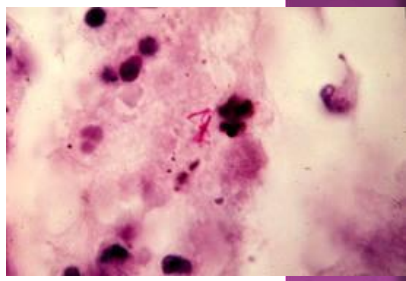
- Incorrect Drug and Dosage selection
  - Results in adverse events and treatment failure

- Failure to monitor Bloods + Hearing
  - Results in morbidity & Mortality (Renal/Deafness) & poor Compliance

CAUSES OF POOR ADHERENCE - 2

- Assess and treat Co-Morbidities
  - untreated or poorly controlled co-morbidities results in poor adherence and outcomes

- Failure to check Blood and sputum Results
  - Results in adverse events and Morbidity and Mortality
  - Results in inappropriate treatment (missed XDR)



- Failure to monitor /Treat Side Effects
  - Results in poor compliance
  - Appropriate support will improve adherence & outcomes

SOCIAL SUPPORT

- Appropriate Social Worker referral for assistance
- Pensions where indicated
- Sick leave
- Unsupported starving patients with hungry children and no roof over their heads are less likely to adhere to treatment

ENSURE RECORDING AND REPORTING

- Statistics are crucial to any program
- Without Stats we have no clue on
  - Trends
  - Problems Areas
  - Outcomes
  - Weakness/Successes

- With proper monitoring we can carry out key interventions
- Failure to monitor and evaluate results often leads to a failure of a program

ENSURE DRUG SUPPLY

- Need good stock control and management
- Failure can result in an amplification of resistance
- Don’t wait for drug to run out before interventions
- Sometimes it is beyond our control
  - Need active checks and balances & monitoring
  - Need advocacy to pressurize state sector for improved systems

PROPER DOCUMENTATION

- Resistance/Treatment failures have occurred because critical information was not documented
- Problems arise when we
  - Fail to take a proper history (drugs/results/co-morbidities
  - Fail to examine patients fully
  - Fail to document adverse events
  - Fail to document treatment changes

All these can result in Mismanaged patients!

WE HAVE RESPONSIBILITY

- To provide a minimum level of care
- To treat patients humanely
- To treat patients with dignity
- To show a basic level of diligence
- To show compassion and caring
  - Previous studies have shown that HCW attitudes to patients, impacts on adherence
- We are in this profession to provide health to others
- It should not just be a job!

WE ARE ALL UNIQUE

- Every District is unique
  - Each has a different setup
  - Each has its own advantages/disadvantages
  - Each has its own challenges and solutions
- Each doctor is unique
  - Each has strengths and weaknesses,
  - Each has different obligations
  - Each varies in his interest and diligence
- Each patient is unique
  - Each has a different set of illnesses
  - Each has a different attitude & circumstances
  - Each comes from a different cultural and social background
- We need to embrace this uniqueness and find solutions that are unique to our situation.
  - One size does not fit all

Do you recognize this doctor?

TAKING OWNERSHIP OF A PROGRAM

- Many TB facilities failed to take ownership of MDR TB Programs
- Many Health Care workers & facilities deny treatment for MDR patients
- As Health care workers we have an obligation to treat and care for the sick
- The patients have placed their trust and lives in our care.
- The program will succeed or fail depending on what you do or how much you do or how far you are prepared to go.

DO NOT FAIL YOUR PATIENTS!

Its like stabbing them in the back!

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