

Burden of asthma and COPD

- Main causes of mortality are infectious diseases (57% of total deaths).
- NCD's estimated 23% of the total of deaths due to: CVD diseases (7%), cancers (4%), **CRD** (1%), Diabetes (1%) and other NCD's 10%.
- **Prevalence of asthma in children** of 6–7 and 13–14 years of age is 13.3% (ISAC 2005) but in adults this number it is unknown.
- Hospitalizations due to asthma: 1st Cause of Hospitalar Morbility from respiratory diseases in reference hospitals.
 - In the Emergency Departements, of these same hospitals, exacerbations of asthma were 16,6% over all patients. (registration of hospitals).

Deaths due to asthma were 9. (0,5%) Between 2009 and 2013. (Registration of hospital deaths)

• Prevalence of COPD Hospitalizations and of deaths is unknown at national level but in HCM it's the 9th cause of hospitalization and 10th of death.

Health care system

- **Population:** 27 978 000 habs
- **Life expectancy:** \uparrow to 53,5 years (52% with 15-64 ys)
- **60% live rural areas** vs 35 % urban areas



Distance, difficult access, lack of money and transportation, poor health facility conditions.

Patients normally choose traditional healers.



Constraints: Dependency on donor financial support!

CRDs are misdiagnosed, untreated and unregistered.

Lack of spriometers and peak flow meters that are available in a few public health centers.

Reality

Difficult access and distribution of inhaled corticosteroids and inhaled bronchodilators short and long action. No national data of COPD and Asthma in adults.

Collaborations

- Ministry of Health (MISAU); Department for NCDs & Trauma, Violence (DNCD). In elaboration the Strategic Plan for 2017-2027 of NCDs
- MISAU: National Institute of Health. Advocay about CRDs and research in tuberculosis and HIV areas
- MISAU: National Program of Tuberculosis. Advocacy about CRDs and elaboration of manuals of tuberculosis MDR/XDR and projects
- MISAU: Department of Occupational Medicine . Research in pneumoconiosis WHO country office: support to the program defined for Department of NCDs
- Faculty of Medicine Eduardo Mondlane. Introdution the new asthma guidelines in
- the curriculum of medical students. Master's and PhD thesis in CRDs/TB
- ARELP (Respiratory Association of Portuguese Language). Conference, updates and sharing of information on CRDs and TB.

Interventions

Mozambique does not have a specific action plan for GARD but it's activities are included within the Strategic Plan, defined each 10 years, by the Department of NCDs &Trauma and Violence (DNCD) within Ministry of Health (MISAU) created in 2002. There are activities in the country related to CRDs in progress and with the support of differente organizations, working groups and researches.

Interventions during the period 2016/17

• Intervention 1.

Guidelines of Bronchial Asthma in adults. MISAU. 2017. Also, a plan of implementation at national level was designed.



Finished the second STEPwise approach to Surveillance (STEPS) 2014/2015. Article in elaboration.

• Intervention 3.

The Convention on Tobacco Control has been ractified in 2017. There are inspections and control of the sale of cigarettes to minors. Patients received smoking cessation advise wich was implemented at all health care levels

• Intervention 4

Actions against indoor and outdoor polution was made with a collaboration of academic groups or others institutions

Advocacy

To National Institute of Health, as the principal investigator of Burden and outcomes of non-communicable diseases and injuries (DNCI) in urban referral hospitals of Mozambique that will be started at April of 2017, to include in this study the cases of COPD and Asthma with exacerbations, hospitalizations and deaths.

Conference ARELP.

This year in 3-4 of July the first ARELP congress was held in Mozambique. The focus was: COPD, Asthma, Tuberculosis Occupational Diseases and Neoplasias in HIV patient. Also a spirometry course was given to clinicians and nurses. Researchers, clinicians and teachers from ARELP countries attended this meeting and also clinicians and others health technicians from differente parts of the country were present.

• In this meeting were released the first guidelines of Astma in adults.

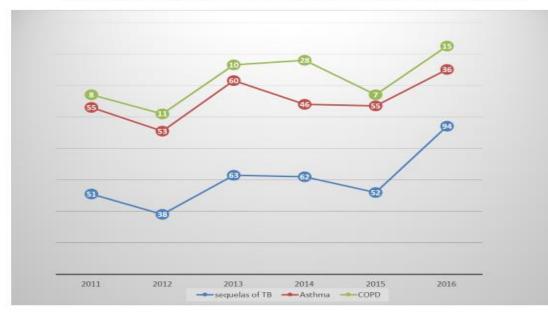


Results and future activities

Main causes of mortality are infectious diseases and for this reason CRDs are important but not a priority.

The program of NCD in our country started in 2002 with a priority of Astma from all **CRDs**

- Asthma: little progress has been made over the last 10 years due to sub diagnostics by clinicians and non notification. Lack of essential medicines.
- **COPD**: diagnosis more dificult with a conspiracy of others elements like HIV/TB and the sequels plus pneumoconiosis and for this underdiagnosis. Other facts are no acess to spirometry, to confirm the diagnostic, and also essential medecines



• Result 1

Result 2 In a study developed in the Emergency room of 4 urban referral hospitals of Mozambique. The burden of

In the Central Hospital

in the last years.

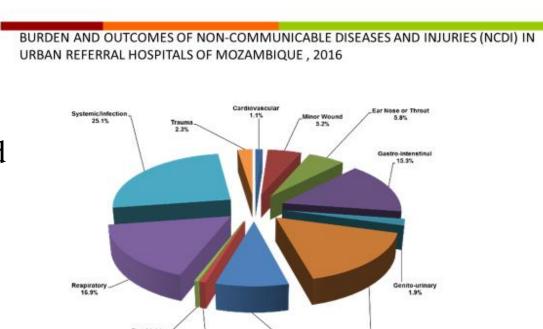
of Medicine (reference hospital)

we observed increase of Asthma,

COPD and also sequels of TB

respiratory disease is a problem observed in a adult cohort of 788 patients:

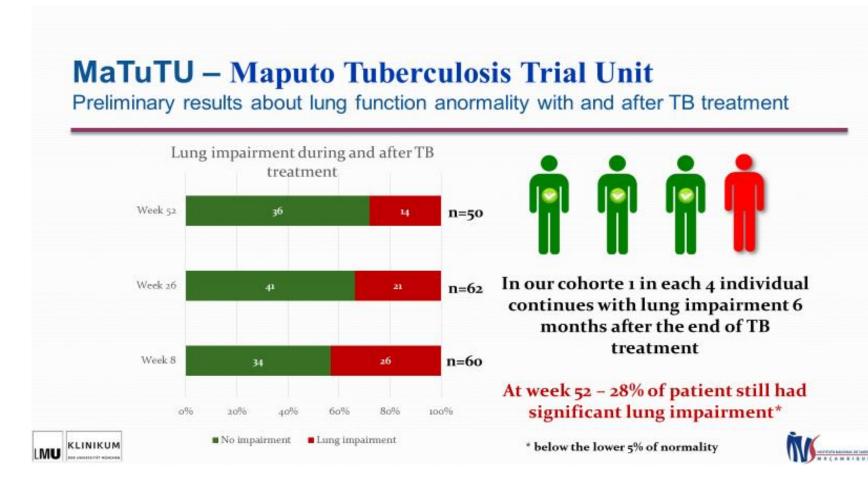
CD was (53%); malaria/gastroenteritis (both 19%). Of the **NCD**: (21%) with HTA and asthma (both 27%).



Result 3

A study was developed in 2016, to assess the proportion of those with abnormal lung function. describe type and severity of lung function impairment in TB patients at weeks 8,26 and 52 after TB treatment initiation. In this cohorte of 81 eligible 65% was HIV+.

1 in each 4 individuals continues with lung impairment 6 months after the end of TB treatment **COPD** !!!



Activities to achieve the objectives to stop the growth of CRDs

- Implementation of "Guidelines of Asthma 2017", at all health care levels (2018-2020)
- Providing spirometeres at the provincial level and peak flow meter in health centres (2018-2020)
- Access and distribution of essential medicines, with quality for Asthma COPD at different care levels
- Training health care workers (clinicians and others technicians) for the diagnosis precocious of CRDs and spirometry (2018-2020)
- Effective registrations of CRDs are crucial creating a platform for it's registation
- with CID-10 for better data collection Prevalence study of COPD and risk factors (2018-2023)
- Study of pneumoconiosis prevalence (2018-2023)
- Advocacy for technical support and resources for CRDs (WHO)

Conclusions

- It is necessary to make CRDs "visible" for policy changes and mobilization of human and financial resources to support chronic nature of diseases and long-term implications to patient, family and society.
- We need to show evidence through studies of their prevalence, risk factors and her
- impact. • Technical advise and support of WHO/GARD is important in this context
- Also once we are dependent of donor funds with focus in infections diseases we need
- to take this through.
- We have a lack of resources and finances to conducting activities against CRDs

At primary level although there is integration of NCDs with CD, its so overloaded for the infections diseases that the others are "forgotten" As decisões sobre as actividades a serem desenvolvidas pela GARD Mozambique

são discutidas num colectivo de trabalho no Department for NCDs and has also the suport of WHO of Mozambique. The decisions regarding the activities being developed by GARD in Mozambique are being discussed as a collective in project by the Department for NCDs which also

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