Results of short-course MDR treatment in Cameroon and in Benin

- Lille, 31 octobre 2011
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Material and methods, Cameroon

- ***Study Site***: Two specialized MDR-TB treatment centres in Cameroon:
- ***Study period***: May 2008 to September 2011
- ***Study design***: Observational study of a cohort of all consecutive MDR-TB patients enrolled from May 2008 to June 2010

Material and methods, Cameroon (2)

Inclusion criteria:

- All consecutive bacteriologically confirmed MDR patients aged 15 years and above
- With no prior history of treatment with second line anti-TB drugs or no more than 1 month
- Who gave informed consent to participate (written since January 2011)

Exclusion criteria (*Never happened)*:

- Being pregnant
- Having a very poor clinical status as judged by the specialist physician
- Presenting history of a known hypersensitivity reaction to any of the regimen's drug

Category of MDR-TB patients according to previous anti-TB treatment history

Category	Number	Percentage
New	0	
Retreatment failure	63	68%
New failure	14	15%
Relapse	11	12%
Other	4	4%
Total	**92**	

18 / 92 were HIV positive (20%)

Drug resistance profile

	%
Resistant to INH and RMP only	34%
Resistant to INH, RMP and SM	31%
Resistant to INH, RMP and EMB	5%
Resistant to INH, RMP, EMB and SM	30%

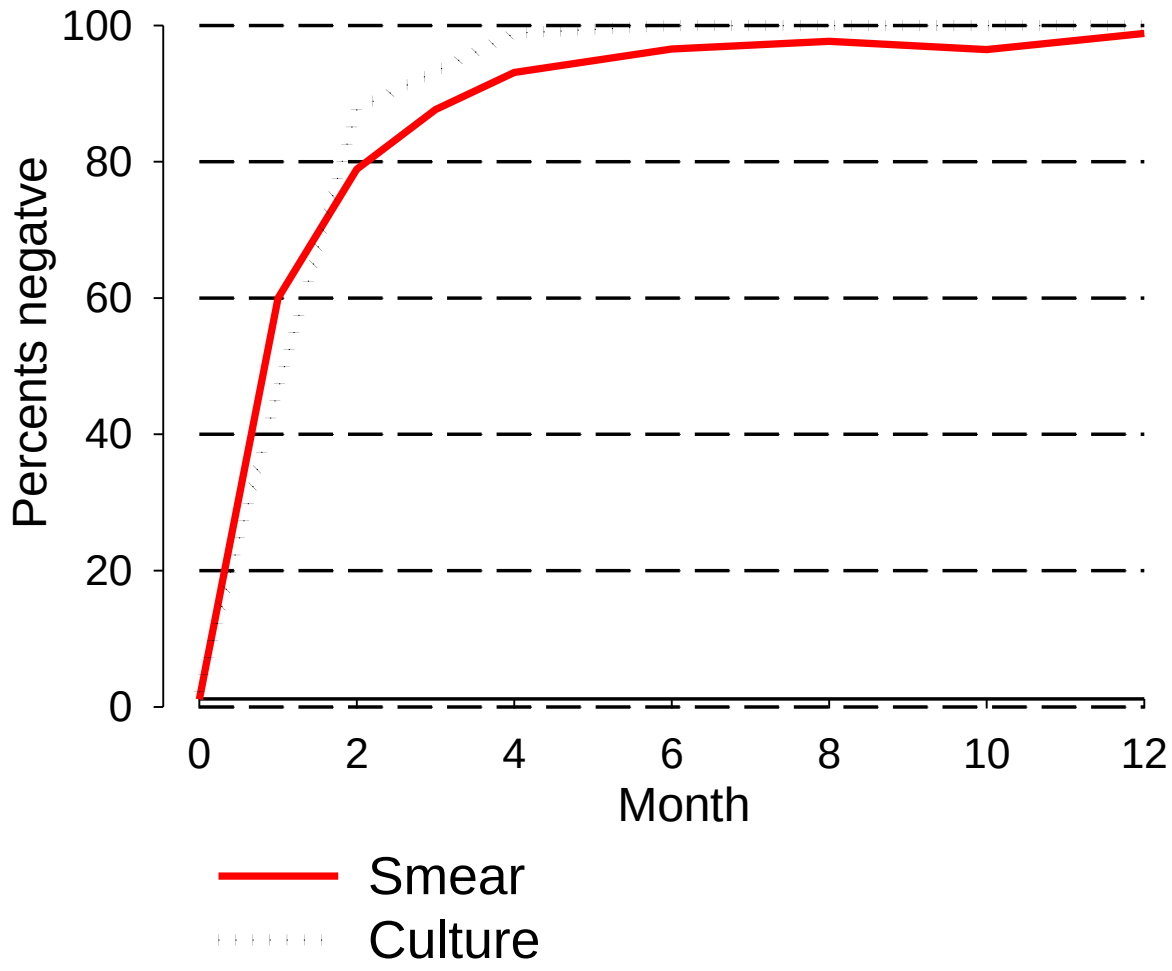
Study procedures

- **Treatment**: All patients offered a 12-month standardized treatment regimen
  - **4 Km Gfx Pto Cfz H E Z / 8 Gfx Pto Cfz E Z**
- **Patient follow-up during treatment**:
  - Treatment directly observed daily by health professionals (including Sundays)
  - Once monthly clinical examination
  - Sputum smear exam and culture monthly for the first 4 months then every two months and at end of months 18 and 24
  - Biological exams: Serum creatinine, potassium, liver enzymes, blood sugar levels, serum TSH and Chest X-ray: regularly performed during treatment.

Bacteriological follow-up

- **Out of 765 possible smear examinations, 757 (99%) were performed**
- **Out of 765 possible culture examinations, 750 (98%) were performed**
- **Main problems:**
  - Kanamycin: 7 (8%) reduction of dosage
  - Prothionamide: 2 (2%) reduction of dosage
  - Ethambutol: 1 stop
  - Pyrazinamide: 1 stop
  - **Glycemia: no problem**

Sputum and culture conversion during MDR treatment, Cameroon



Outcomes of patients at end of treatment

Outcome	N=92	%
Cured	85	**92%**
Treatment completed	0	0
Died	7	8%
Failed	0	0
Defaulted	0	0
Transferred out	0	0

Status of patients 6 and 12 months after declaration of cure

Status	**6 months N= 53**	**12 months N=36**
Remained bacteriologically negative	46	30
Lost for follow-up (so far)	7	6
Recurrent case	0	0

Outcomes of patients at end of 12 months of treatment, Cameroon + Benin

Outcome	N=115	%
Cured	107	**93%**
Treatment completed	0	0
Died	8	7%
Failed	0	0
Defaulted	0	0
Transferred out	0	0

Status of patients 6 and 12 months after declaration of cure (Cameroon + Benin)

Status	**6 months N= 67**	**12 months N=50**
Remained bacteriologically negative	60	44
Lost for follow-up (so far)	7	6
Recurrent case	0	0

CONCLUSION

- Preliminary results of short course 12-month regimen appear to be excellent in SSA (comparable results in Niger)
- They are very similar to the Bangladesh results with a 9-month treatment
- Excellent follow-up +++ (too good??)
- In Benin, since 1 January 2011, they are shortening the regimen to 9 months
- In Cameroon, they want to finish to include 150 MDR-TB cases, and then go for 9-month regimen

The way forward

- Thanks to The Union support, there is enough drugs to finish the study in Cameroon
- Two questions for the MDR-TB patients:

1) How to get the money to pursue the treatment after the study, and to extend to the rest of the country ?

– There is a lot of money in Cameroon from the Global Fund to finance the drugs but there was no Green Light from WHO and this money is frozen

2) How to extend to the other countries in the region?

International considerations

- 1 MD from WHO Geneva came in May 2011 and participated in the review of the files
- End of July, a TDR mission was sent by WHO Geneva; ToR:
  - *Establish the credibility of the data in a study originated in 2008 by assessing whether the study was conducted in compliance with Good Clinical Practice (GCP)*
  - *Evaluate possibilities regarding scaling up treatment for the whole country*

Confidential report of the TDR/WHO mission

Conclusion

“the study has a selection bias and does not strictly comply with the key elements of GCP. However, if the weaknesses identified in this report are addressed for current and future patients, this study could provide useful results to inform the national scale-up of treatment for MDR-TB in Cameroon. This increased research capacity would be extremely valuable and should be supported.”

- **Answer from The Union.** This report is so weak, and contains so many errors that it has no value, and should not be considered

- We are still waiting for official reports and Cameroon has not received any official feed back from the TDR/WHO mission.

Some questions

- Do Cameroon need the WHO Green Light to buy 2nd line drugs ? Is there still a Red light committee? We asked WHO, but no answer so far
- If NO more Green/Red light committee, should Cameroon go directly to the Global Fund (through the GF TB officer?)?
- If there is still a Green/Red light committee, should The Union request an expertise from another body than TDR to evaluate the project if WHO does not reject the report?

For memory,

- ✓ the 9-month regimen is in the Union Guide and *"might be considered when formulating a national policy*".
- ✓ *The Ethical Advisory Group of The Union gave its clearance for the Cameroon study*