

Presentation of Results of the Rapid Assessment Protocol for Insulin Access in Mali



International Insulin Foundation
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Background information

- Diabetes
- Insulin
- Type 1 diabetes and insulin in developing countries
- Incidence and prevalence of diabetes
- International Insulin Foundation (IIF)
- Santé Diabète Mali



Rapid Assessment Protocol for Insulin Access (RAPIA) :

Multi-level assessment of Health system

Macro

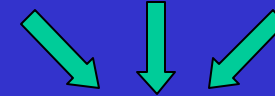
- Ministry of Health
- Ministry of Trade
- Ministry of Finance
- Central Medical Store
- National Diabetes Association
- Private/Public drug importer
- Educators

Meso

- Regional Health Organisation
- Hospitals, Health Centres, etc.
- Pharmacies, Drug Dispensaries

Micro

- Healthcare Workers
- Traditional Doctors
- Patients



Perspectives on the problem of access to Insulin and Diabetes care

What information does the RAPIA provide:

- Study the path of Insulin from its arrival in the country
- Study the path of care
- Other problems



Implementation of the RAPIA in Mali

- Why Mali?
- Areas studied - Bamako, Sikasso (City of Sikasso and Kadiolo Cercle), Tombouctou (City), Douentza (Cercle)



Implementation of the RAPIA in Mali

- Number of interviews and discussions

Area	Patient	Pharmacy	Healthcare worker	Traditional Healers	Health Facilities	Regional level	National level
Bamako	18	11	12	10	8	5	20
Sikasso and Kadiolo	11	6	7	8	5	5	
Timbuktu and Douentza	10	3	5	2	3	5	
Total	39	20	24	20	16	11	20

Total = 150

Type 1 diabetes in Mali

- Official statistics do not exist
- IDF estimate - **790** people
- IIF estimates using data collected during RAPIA

Location	Number of people with Type 1 diabetes	Prevalence of Type 1 diabetes per 100,000 population
Bamako	310	27.9
Sikasso	34	1.8
Timbuktu	13	2.9
Kadiolo	2	1.4
Douentza	0.3	0.2

- Estimate for Mali: **453**
- Prevalence of 4.4 per 100,000 population

Type 1 diabetes in Mali

- Life expectancy depends on the region where the person lives

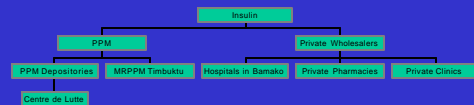
Age Range	0-14	15+
Mali		
IDF estimate	1.5	12.3
Mali	1.0	11.0
Bamako	3.0	17.1
Sikasso	0.2	4.7
Timbuktu	0.3	7.6

Mali 's insulin supply

- Fast and slow acting insulin are present on the essential drug list
- Majority of insulin in Mali is supplied by two private wholesalers
- First purchase in 3 years by the PPM in August 2004
 - PPM is unable to find generic
 - Insulin is costly and the PPM needs to prioritise its resources
 - There are not many suppliers of insulin - when the PPM prepares a tender it needs to receive responses from at least 3 suppliers

Mali 's insulin supply

- The path of insulin in Mali

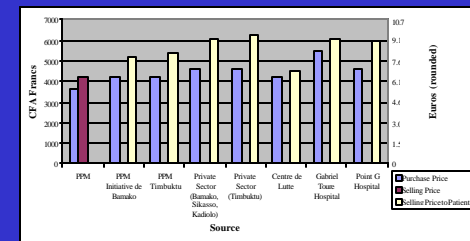


Mali 's insulin supply

Region	Total	Proportion population	Proportion insulin	Number of people with "Insulin requiring diabetes"
Bamako	7,799	10%	52%	240
Sikasso	562	18%	4%	17
Timbuktu	187	5%	1%	6
Total pour le Mali	15,005			462

¹ - Estimate based on the quantity of insulin supplied by the two private wholesalers to public and private health facilities and an annual consumption of 13 vials a year per person

Price of insulin in Mali



Insulin alone is not enough...

- Syringes are not present in the public sector
- Lack of diagnostic tools
- Problems with the supply of diagnostic tools (urine test strips, strips for glucometers, analysis tubes and reagents)

Access to care

- Lack of trained staff
- Organisation of care at different levels of the health system
 - Bamako:
 - Centre de Lutte
 - Hôpital Gabriel Touré
 - Hôpital du Point G
 - Sikasso
 - Hôpital Régional de Sikasso
 - CSREF ville de Sikasso
 - CSREF Kadiolo
 - Timbuktu
 - Hôpital Régional de Tombouctou
 - CSREF ville de Tombouctou
 - Douentza
 - CSREF Douentza

Association Malienne de Lutte Contre le Diabète (AML D)

- Bamako
 - Centre de Lutte
 - Regroupement
- Sikasso
- Timbuktu

Other observations

- New section on Non Communicable Diseases in Mali's health policy
- The SLIS (Health Information System) does not contain any data on Non Communicable diseases and diabetes
- Importance of traditional healers
- Lack of control for with regards to donations of medicines and materials coming from abroad

Some positive points

- Strong political will and recognition of diabetes as a public health problem
- Active doctors and associations
- Possibility of implementing the "STEPwise" Approach of the WHO on the surveillance of risk factors for Non Communicable Diseases
- Santé Diabète Mali
- Activities for World Diabetes Day engender much interest and publicity for diabetes

Summary of Results

- *Data and information* :
 - Standardised means of collecting information
 - Lack of information on the number of people with diabetes in Mali
- *Insulin*:
 - Not available at the lowest price possible
 - Not always available in the public sector
 - High price of insulin to patients

Summary of Results

- *Materials:*
 - Syringes are not available in the public sector
 - Value Added Tax (VAT) of 5% on syringes
- *Care for diabetes:*
 - No guidelines or treatment protocols
 - No organisation and coordination of care and referrals
 - Sub-optimal use of existing health facilities
 - Long waiting times
 - Lack of patient education

Summary of Results

- *Diagnostics:*
 - Lack of appropriate materials at the appropriate levels of the health system
 - Problems with supplies
- *Healthcare worker education:*
 - Lack of basic knowledge with frontline healthcare workers
 - No continuing education and training

Summary of Results

- *AML:*
 - Lack of a defined role
 - No national structure
- *Other:*
 - Better cooperation and coordination between all partners
 - The document on NCDs being elaborated is not adapted to the situation outside Bamako
 - Lack of coordination with donations
 - Role of traditional healers
 - Cost of treatment a major burden on patients

Summary of recommendations

- *Data and information :*
 - Develop standardised patient information sheet or record keeping system
 - Carry out a basic survey to assess the prevalence of diabetes in Mali
- *Insulin:*
 - Join the Novo Nordisk LEAD Initiative
 - Registration of generic insulin manufacturer
 - Develop proper purchasing and distribution mechanisms at the Pharmacie Populaire du Mali (PPM)
 - Decision by the government whether insulin should be provided free of charge or at a subsidised cost to some or all patients

Summary of recommendations

- *Materials:*
 - Add syringes to Essential Drug list
 - Remove 5% VAT on all materials necessary for proper diabetes care
- *Care for diabetes:*
 - Adapt IDF guidelines to Mali
 - Better organisation of diabetes consultations and integration of patient education
 - Define the role of each level of the health system with regards to diabetes care
 - Identify a focal point in each region for diabetes care

Summary of recommendations

- *Diagnostics:*
 - Develop a realistic and sustainable Essential Equipment list for each level of the health system
 - Develop a supply chain for laboratory materials
- *Healthcare worker training:*
 - Improve basic healthcare worker training to include more on diabetes care and NCD management

Summary of recommendations

- **AMLD:**

- Diabetes Association to analyse its role in care and support of people with diabetes in Mali
- Organisation of the AMLD as a national entity

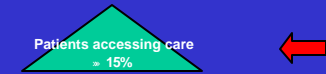
- **Other:**

- Establishment of a working group on diabetes in Mali
- Reorientation of the policy document based on the RAPIA findings
- Establishment of donation guidelines and control mechanisms
- Inclusion of traditional healers in diabetes programmes
- Find novel and sustainable ways to address the financial burden that diabetes puts on the individual and the health system

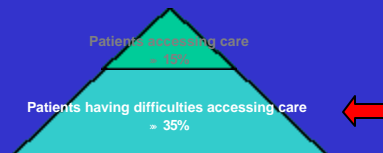
Priorities for Mali following the meeting held 14.12.2004

- Improve purchasing and distribution mechanisms at the PPM
- Join the Novo Nordisk LEAD Initiative and initiate registration of generic insulin manufacturer
- Add syringes to Essential Drug list
- Organisation AMLD as a national entity
- Establishment of a working group on diabetes in Mali
- Adapt IDF clinical care guidelines to Mali
- Carry out a basic survey to assess the prevalence of diabetes in Mali
- Develop a sustainable Essential Equipment list for each level of the health system
- Develop a supply chain for laboratory materials
- Improve basic healthcare worker training

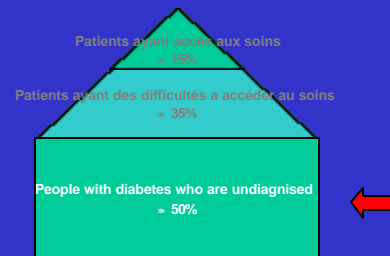
The recommendations and their implications



Les recommandations et leurs implications



Les recommandations et leurs implications



Conclusion

- The IIF will help its partners in Mali to put in place these recommendations
 - This project is the first step in the creation of the proper conditions for the diagnosis, care and follow-up of patients with diabetes in Mali
- ⇒ **This project has implications for all NCDs and chronic conditions**