

PID management in AFRICA: Where we are now?



AFRICA

55 countries



North Africa

West Africa

Est Africa

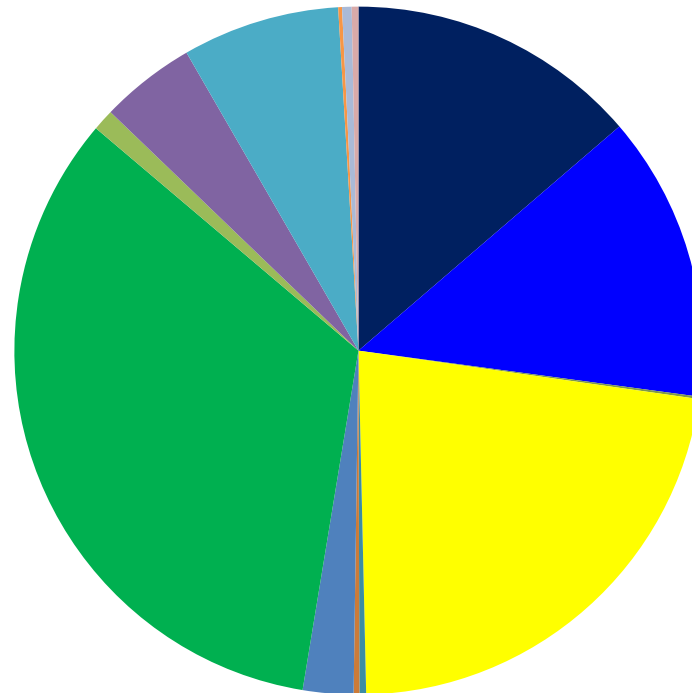
Central Africa

South Africa

Low PIDs registred in Africa (faible régistre)

2450

PID patients

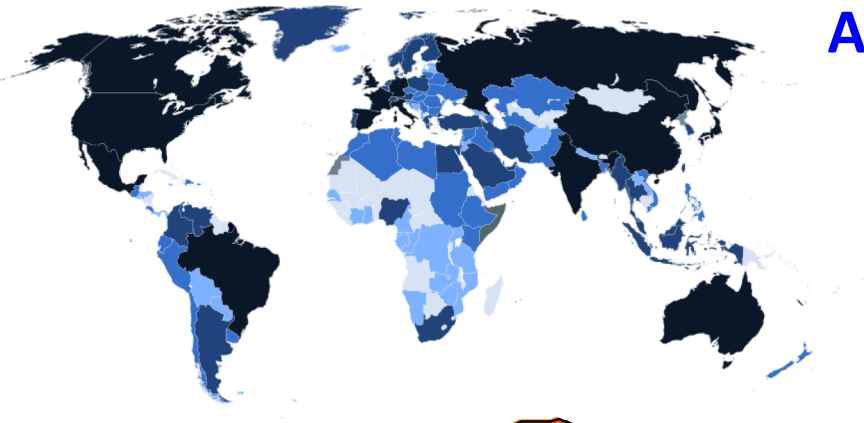


- Morocco
- Algeria
- Burkina Faso
- Tunisia
- Benin
- Senegal
- Libya
- Egypt
- Sudan
- Côte d'Ivoire
- South Africa
- Mali
- Zambia

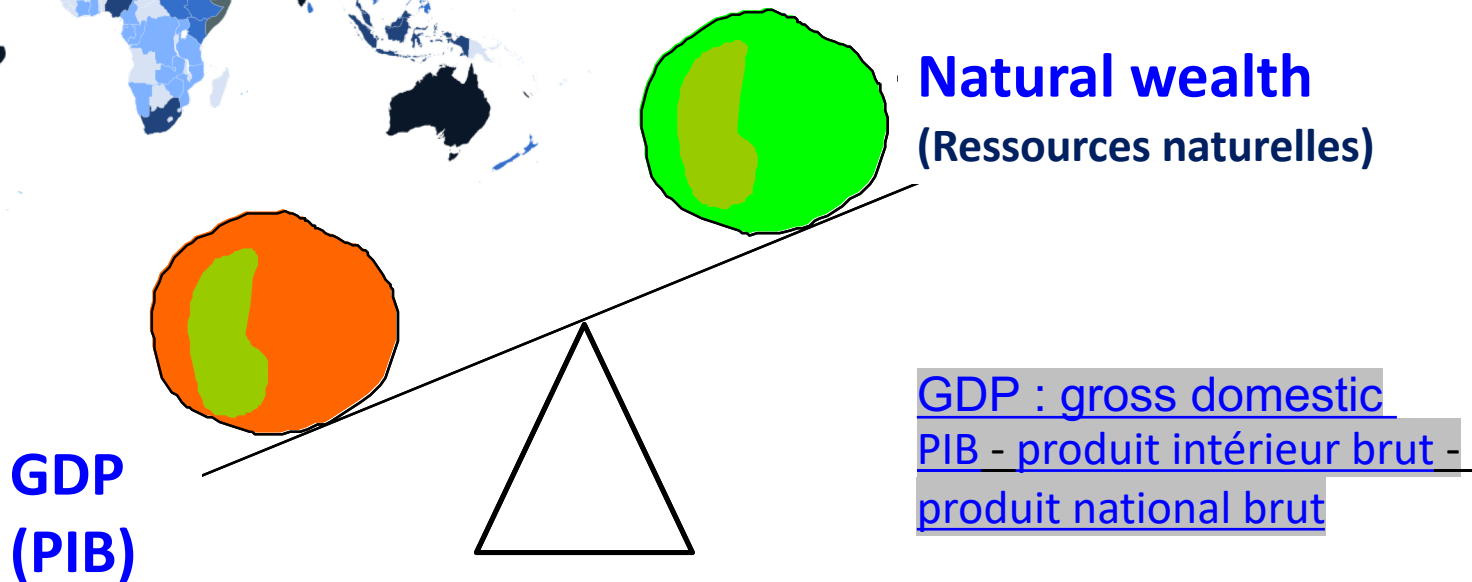
Countries that are doing well are middle income with **high rate of consanguinity** (beaucoup de mariages consanguins)

Africa : majority of low income countries

Pays à faible revenu



Africa's entire **GDP** is still only about the GDP of **France**



In 2015, the combined GDP of African countries was US\$2.24 trillion according to the World Bank,

Most African countries GDP estimates are weak

PID management in AFRICA: Where we are now?

5 Priorities to access to therapies in AFRICA

- 1. Diagnose PIDS (more training for medical doctors)**
- 2. Availability of health insurance**
- 3. Advocacy to the ministry of health (Encourage
Government to create / PID Centers)**
- 4. Immunoglobulins for all patients (Currently: 20-80%). Need :
Sensitize governments**
- 5. Provide allograft**

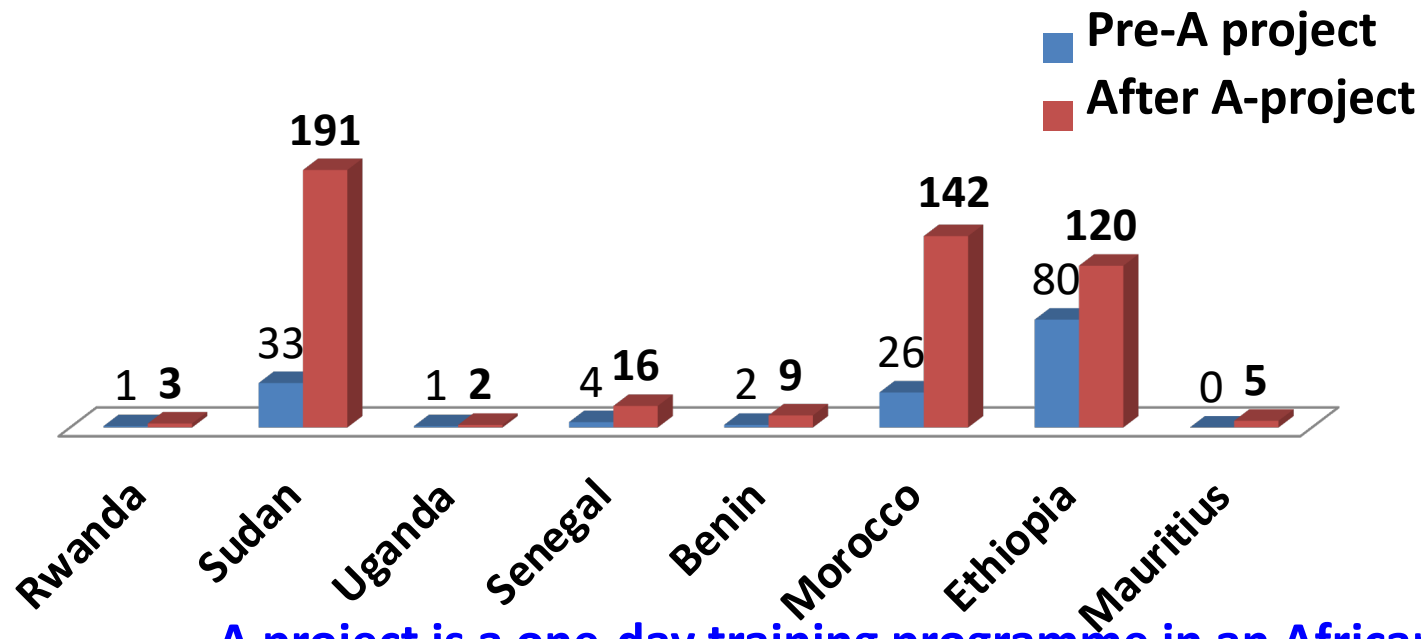
Diagnose PID's (more training for medical personal)

Diagnose PIDS (more training for medical personal)

- **More training for medical doctors (The A Project)**
- **More training for NURSES (INGID/A project)**
- **More training for Biologistes (Biol A project)**
- **More training for patients (IPOPI)**

EFFORT MADE TO MORE DIAGNOSE AND CARE PID IN AFRICA

Effect of A project on PID diagnosis



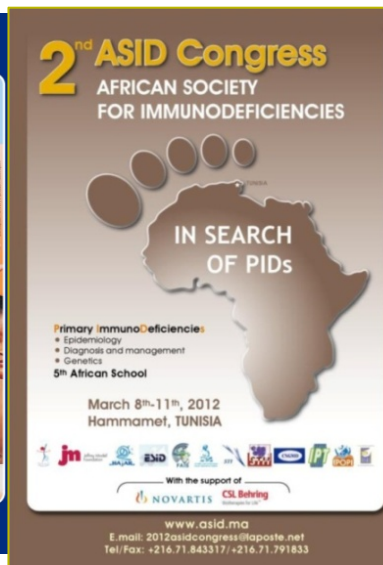
A project is a one-day training programme in an African country to train healthcare professionals for the diagnosis and management of PID.

EFFORT MADE TO MORE DIAGNOSE AND CARE PID IN AFRICA

« Medical » Language at ASID Schools and 5 Congresses



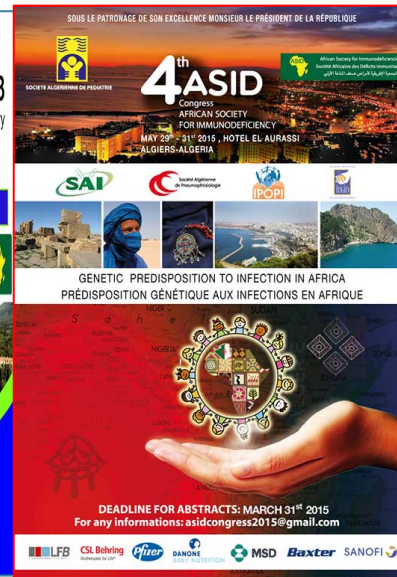
Casablanca, 2008



Tunisia, 2012



Sun Ciy, 2013



Algeria 2015

Availibility of health insurance

- ☐ **Weak existing insurance in Africa**
- ☐ **Couverture maladies universelles au SENEGAL**
- ☐ **Soins gratuits pour les enfants de moins de 5 ans au SENEGAL (Etat du Sénégal)**

Availability of health insurance

How about the availability and access immunoglobulins in AFRICA



**Many hurdles
(beaucoup d'obstacles)**

Availability and access to immunoglobulins

(Disponibilité et accès aux immunoglobulines)

The majority of immunodeficiency diseases in Africa are a poor IgG levels and need a medical treatment as

|

❑ **Immunoglobulin replacement therapy :**
IVIg or SCIg
= immunoglobulines de remplacement
(en sous cutanée et en intraveineuse en sous)

Ig needs / coverage (besoins et couvertures)

	Possible Minimal Extraction of IgG	PID reported	Ig needs for PID patients	Ig needs coverage (x)
Worldwide	7 284 295 605	60 634	2 684 337	18
Europe	742 067 180	28 068	1 242 603	4
Northern America	359 638 192	19 025	842 259	3
Africa	1 145 315 872	2 450	108 464	69
Northern Africa	227 031 258	2 169	96 024	15
Eastern Africa	369 106 291	22	974	2 475
Western Africa	345 962 675	44	1 948	1 160
Middle Africa	143 630 836	1	44	21 185
Southern Africa	59 584 812	208	9 208	42
Morocco	33 570 277	521	23 065	10
Tunisia	11 026 223	900	39 844	2
South Africa	51 430 715	208	9 208	36

PID treatment in Africa

PID treatment	Tunisia (2014)	Morocco (2014)	Algeria (2014)	West AFRICA	Southern AFRICA
Number of Patients	900	520	512	44	208
Estimation Population 2015	11 M	37 M	38 M	345 M	60 M
Ig administration: -IV route -SC route	Yes No	Yes Yes	Yes No	Yes★ No	Yes yes
Ig consumption (PID) , g / year	?	50100 g (PID and Others)	?	?	?
BONE MARROW TRANSPLANTATION	30	23 (10Maroc)	8 (2Algérie)	NO	30

Yes★ but only in private sector (no access in the public hospital)

Availability and access to immunoglobulins

❑ BLOOD TRANSFUSION : (transfusion sanguine)

THE ONLY AVAILABLE REPLACEMENT THERAPY
IN MOST AFRICAN COUNTRIES BUT
NOT ENOUGH TO SAVE PIDs

REPLACEMENT



We need more advocacy to access to immunoglobulins And to save more African childrens (plaidoyer)

❑ World PID Week (IPOPI)

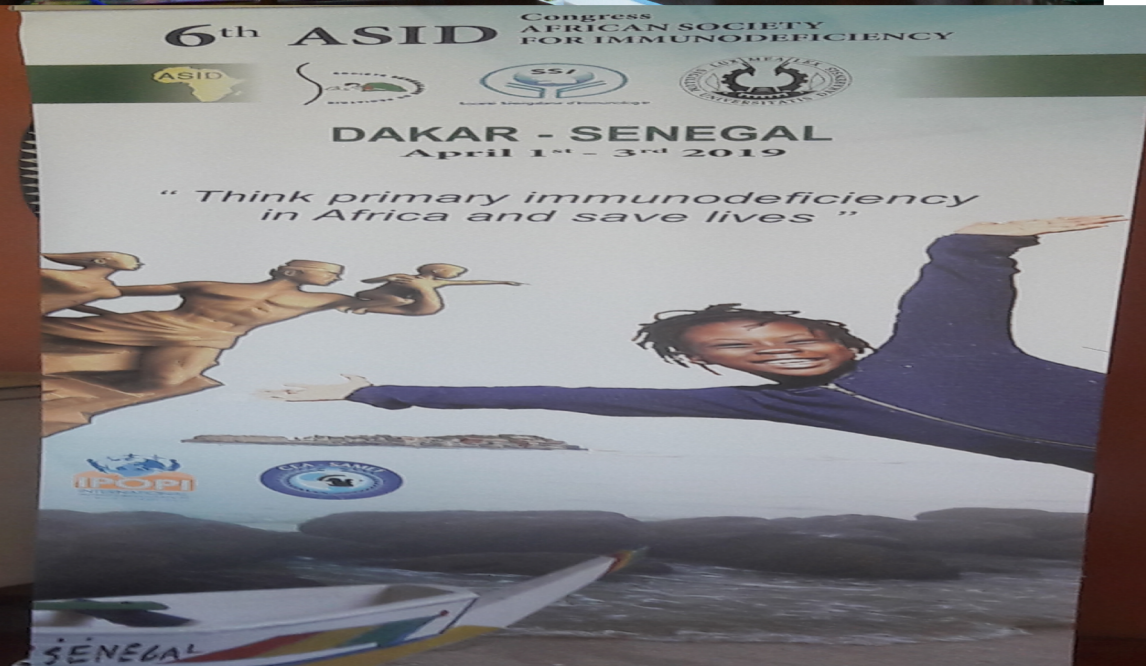


Ayoub (1 year old) before allogeneic BMT



Ayoub (right) 2 years after BMT, with his brother who is the donor.

Early Think to PIDs and save more African childrens



Conclusion

- PID is under diagnosed worldwide (*peu diagnostiqué dans le monde*)
- Blood transfusion is not enough to cover replacement needs (*transfusion sanguine n'est pas suffisante*)
- IVIg & SCIg are not very often available (*immunoglobuline pas accessible partout*)
- Bone marrow transplant is only available in Tunisia & in S africa (*greffe de moelle pas accessible*)
- Encourage governments to give more importance to the access to Ig replacement : *encourager les gouvernements à donner plus d'importance à l'accès aux immunoglobulines de remplacement*)