

CORPORATE COUNCIL ON AFRICA HEALTH FORUM

CORPORATE COUNCIL ON AFRICA ABSTRACT

African manufacturers supplied 20% to 30% of pharmaceuticals for the estimated USD3.8 billion sub-Saharan pharmaceutical market in 2006.

More than 70% of that production originated from South Africa. Increasingly, many other African countries are actively pursuing local production capacity.

Pharmaceutical Manufacturers in Africa

At the Corporate Council on Africa Health Forum on 20 and 21 November 2008, I sat in a workshop on pharmaceutical manufacturing that was moderated by Mr Nazeem Mohammed.

pharmaceutical are being manufactured across Africa. The workshop focused on production in Uganda and South Africa; certainly pharmaceutical manufacture is not confined to these 2 countries: I have seen pharmaceutical factories in Lagos in Nigeria and in Nairobi in Kenya. The moderator and 4 panelists explained to us concerns and triumphs in the pharmaceutical manufacture in their countries.

STAVROS NICOLAOU
CHIEF OPERATING OFFICER,
ASPEN PHARMACARE HOLDINGS, LTD
SOUTH AFRICA

Stavros Nicolaou is a pharmacist and CEO of Aspen, South Africa, the largest pharmaceutical manufacturing company in South Africa, a multinational pharmaceutical company based in South Africa.

From Aspen's web-site (<http://www.aspenpharma.com>): Aspen has businesses in South Africa,

Australia, India, Brazil, Mexico, Venezuela, Kenya, Tanzania, Uganda, Mauritius and the United Kingdom. Aspen, listed on JSE Ltd, is Africa's largest pharmaceutical manufacturer, a major supplier of branded and generic pharmaceutical, healthcare and nutritional products to the southern African and international markets. Aspen has 15 pharmaceutical manufacturing facilities on 11 pharmaceutical manufacturing sites on 3 continents, with 4 sites in South Africa. Press releases on Aspen's web-site reported partnerships with GlaxoSmithKline.

Dr Nicolaou took us through 4 slides, explaining the imbalance in pharmaceutical production all across the continent of Africa: Africa is an importer of pharmaceutical, not an exporter, and Dr Nicolaou wants this to change.

He told us that a major stumbling block to pharmaceutical manufacturing across Africa is the lack of a pan-African regulatory authority for marketing drugs. This mutual recognition by national authorities, so, for example, a drug approved in Kenya is approved in Nigeria, is needed for a thriving pharmaceutical industry in all countries of Africa. However, it has only been achieved across Europe in the past 5 years.

GEORGE BAGUMA
MARKETING DIRECTOR
QUALITY CHEMICAL INDUSTRIES
UGANDA

On 08 October 2007 a USD38m pharmaceutical plant was opened in Uganda on a 15 acre site southwest of the capital Kampala, by the drug importer Quality Chemical Industries.

The factory started producing the triple therapy anti-

The Corporate Council for Africa Pharmaceutical Marketing panel discussion was led by Nazeem Mohammed, right, bottom right. Other panelists were Stavros Nicolaou, below and middle right; Patrizia Carlevaro, below and far right, George Baguma, middle and top far right.



CORPORATE COUNCIL ON AFRICA HEALTH FORUM

DEDICATED TO ADDRESSING HIV / AIDS AND MALARIA



Pharmaceutical manufacturers who spoke:

- Patrizia Carlevaro, Head of the International Aid Unit, Eli Lilly and Company
- Stavros Nicolaou, COO, Aspen Pharmacare Holdings, Limited
- George Baguma, Marketing Director, Quality Chemical Industries
- Madiké Seye, Vice President - Sub-Saharan Africa, GSK

retroviral and a first-line antimalarial therapy in January 2008, after validation.

Technology and expertise came from an Indian pharmaceutical company, CIPLA. The active pharmaceutical ingredients to produce the drugs are imported from India.

Pictures on these pages were taken from Mr Baguma's slide presentation.

MADIKÉ SEYE
VICE PRESIDENT
SUB-SAHARAN AFRICA
GLAXOSMITHKLINE

Dr Seye discussed the challenges and opportunities throughout sub-Saharan Africa. The main challenges are the sheer numbers of human needing therapy and the lack of technical expertise and facilities to meet these needs.

GlaxoSmithKline is a multinational pharmaceutical company which, like many pharmaceutical companies, including Eli Lilly, has its roots in Philadelphia. Ten years ago what had been Smith Kline & French before becoming SmithKline Beecham, partnered with the British pharmaceutical company Glaxo. GSK is huge and whatever it does in Africa affects the lives of millions.

GSK conducts clinical trials through sub-Saharan Africa, more in South Africa than anywhere else. In January 2009, the United States Clinical Trials database listed 360 clinical trials that focus on participants with malaria or at risk for malaria: of these clinical trials, GSK is sponsoring 21. Additionally, GSK is sponsoring 8 trials focusing on HIV/AIDS in Kenya, South Africa and Ghana. The country with the biggest burden of malaria, Nigeria, has 3 clinical trials sponsored by GSK.

GSK has been working to produce a malaria vaccine with partners in Kenya: abstract summary on the next page.

PATRIZIA CARLEVARO
HEAD OF THE INTERNATIONAL AID UNIT
ELI LILLY AND COMPANY

Eli Lilly sponsors 23 clinical trials in Africa, in South

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Africa. These clinical trials test therapies for diseases which are most successfully treated in Europeans and Americans with access to healthcare. 23 are listed in the Clinical Trials database.

Dr Carlevaro is an Italian chemist. Her unit wants to head off a potential pandemic caused by rapidly transmitted multi drug resistant-tuberculosis. She had some frightening statistics about MDR-TB in China, India, Russia and South Africa. Russia has the highest incidence of MDR-TB: an estimated 13% (19,000 patients) of all newly diagnosed are MDR-TB. South Africa however has the highest reported number of humans infected: 453,000 every year of which 20,000 die.

Eli Lilly has a lot of initiatives, and donates more than 6% of its gross income. They offer manufacturing firms in MDR-TB "hot spots" (China, India, Russia, South Africa) the technology to produce 2 second line TB drugs.

MR NAZEEM MOHAMMED
CEO AND GENERAL MANAGER OF KAMPALA
PHARMACEUTICAL INDUSTRIES LTD
CHAIRMAN OF AGA KHAN HEALTH SERVICE,
UGANDA

After the workshop I sat next to the Workshop Moderator, Mr Nazeem Mohammed, at lunch. His companies are part of the Aga Khan network and Mr Mohammed reports directly to the Aga Khan. Mr Mohammed is Ugandan, and was in boarding school in England when his family was deported from Uganda along with thousands of other Ugandans of Indian ancestry. He trained in life sciences, and had a successful career in the pharmaceutical industry throughout Europe before returning to Uganda. He makes monthly business trips to Nairobi, and also annual trips to meet with the Aga Khan in Paris.

Kampala Pharmaceutical Industries Ltd (<http://kpi.co.ug>), is a large pharmaceutical manufacturer in Uganda. According to their website, "we produce a broad range of pharmaceutical products relevant to the region. Most common of these are our ranges of antimalarials, antimicrobials, analgesics, topicals and cough and cold." They also produce Microwell

THE AGA KHAN NETWORK

The Aga Khan network is interesting to MJoTA because it is huge, it is philanthropic, it is successful, and it is improving the lives and life spans of many of all faiths. MJoTA's Clinical Managing Editor has written about the Aga Khan University Hospital of Nairobi (Elana Stolpner MD, MJoTA 2009 Vol3(1):5-7)

The Aga Khan network has had a huge influence on MJoTA. One of their companies is the Nation Media group, which publishes Business Daily Africa, which is referred to frequently on these pages. MJoTA contributor Macharia Waruingi was a frequent columnist to Business Daily Africa, as is MJoTA friend Laila Macharia, a lawyer and real estate developer in Nairobi.

I have seen a photograph of the Aga Khan shaking the hand of the President of Kenya in Nairobi. Which I interpret to mean he and his Foundation are very welcome in Kenya.

A video of the Aga Khan Fund for Economic Development can be seen by linking to http://www.akdn.org/akfed_companies.asp.

MJOTA SUMMARY

Efficacy of RTS,S/AS01E vaccine against malaria in children 5 to 17 months of age. From over 25 authors at the Centre for Geographic Medicine Research (Coast), Kenya Medical Research Institute, Kilifi, Kenya. pbejon@kilifi.kemri-wellcome.org. N Engl J Med. 2008 Dec 11;359(24):2521-32. Epub 2008 Dec 8.

A previous study of the malaria vaccine RTS,S (which targets the circumsporozoite protein), given with an adjuvant system (AS02A), showed a 30% rate of protection against clinical malaria in children between 1 and 4. We tested (double-blind, randomized) RTS,S/AS01E vaccine versus rabies vaccine in children of 5 to 17 months in Kilifi, Kenya, and Korogwe, Tanzania. The primary end point was fever with a falciparum parasitemia density of over 2,500 parasites/microL, and the mean follow-up was 7.9 months (range, 4.5 to 10.5). A total of 894 children received the RTS,S/AS01E vaccine or the control (rabies) vaccine. Of the 809 children who completed the study, clinical malaria developed 66 of 407 receiving the rabies vaccine, and in 32 of 402 receiving RTS,S/AS01E (they had less severe malaria).

Enzyme Immunoassay Kits and Rapid Diagnostic Test Devices.

By Wanjiru Akinyi Waruingi BSc(Hons), PhD