LIST OF ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
AIM	AIDS Integrated Model
AITRP	AIDS International Training and Research Program
ARVs	Antiretroviral Therapy
AZT	Zidovudine
BCG	Bacille Calmette Guerin
BCM	Body cell mass
BIA	Bioelectrical Impedance Analysis
CBOS	Community Based Organisations
CD4	Cell Differentiation 4
CDC	Centers for Disease Control
CDR	Case Detection Rate
CRT	Coma Recovery rate
CSO	Civil Society Organisation
CSUP	Civil Society Umbrella Programme
CQ	Chloroquine
DCI	
DFID	Department For International Development
DOTS	Directly Observed Therapy
EU – ACP	European Union - African Caribbean
FDA	Food and Drug Administration
FCT	Fever clearance time
GOU	Government of Uganda
GTZ	German Technical Corporation
HIV	Human Deficiency Virus
IDP	Internally displaced camps
JCRC	Joint Clinical Research Center
MBChB	Bachelor of Medicine, Bachelor of Surgery
MDG's	Millennium Development Goals
M.O.H.	Ministry of Health
MTCT	Mother to Child Transmission
NIMES	
NLTP	National Leprosy Tuberculosis Program
NVP	Nevirapine
PLWAs	People living with AIDS
PMTCT	Prevention of Mother to Child Transmission
PPAs	
PPD	Purified Protein Derivatine
RFLP	Restriction fragmented length polymorphism
SP	Sulphadoxine Pyrimathamine
TASO	The AIDS Support Organisation
TBTC	
TRIPS	
T.B	Tuberculosis
UNAIDS	Joint United Nations Programme on HIV/AIDS

UPHOLD
USA United Staes of America
USHS Uganda Society for Health Scientists
WHO World Health Organization

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OPENING REMARKS FROM DR. CHRIS WHALEN

It makes me proud to be here for the 6th meeting of the Uganda Society for Health Scientists. The Society has grown and developed tremendously since it was started in 1999. It has attracted and made personalities of young investigators to mix with senior researchers; making a strong research infrastructure here in Uganda for many years to come.

The program at Case western is to work with institutions like the Society. I am impressed by the growth of the Society and it's Case western's interest to work with the Society for its further progress. I hope to see more young investigators make substantial advances in research in the areas of T.B, Malaria and HIV/AIDS.

I would like to thank the Executive Board for the job well done. I would not forget the contribution of the Secretariat staff for the excellent work they are doing in steering the Society forward.

With those short comments, I would like to thank you for attending the conference and I hope that it will be beneficial to you and inspire you to ask more research questions in the areas of malaria, T.B and HIV/AIDS.

I thank you very much.

OFFICIAL OPENING OF THE 6th ANNUAL CONFERENCE

Welcome remarks to the Guest of Honor by Prof. J. Konde Lule

Ladies and Gentlemen, allow me introduce to you the representative of the Minister of Health; he is Dr. Amandua Jacinto who was born some 50 years ago in Arua. He studied in Arua in what he calls a village primary school in Koboko; West Nile. He graduated with MBChB in 1984 and MMED in internal medicine in 1991. He has worked in various hospitals including Yumbe and Arua Hospitals as Medical Superintendent. Right now, he is Consultant Physician and Commissioner in charge of Clinical services with the Ministry of Health since 1998. He has done a lot of research and has documented 10 publications both clinical and public health. Among his major interest is research and evidence based facts. So we are very delighted to have a commissioner who is a key researcher and also involved in evidence based decision-making. Mr. Commissioner, given your background, you should be a member of the Society.

Mr. Commissioner, please allow me invite you to address the gathering.

Speech by Dr. Jacinto Amandua

I am very delighted to be here today to represent the Minister of Health; Hon. Maj. Gen. Jim Muhwezi who due to other state duties was unable to be with you at this opening ceremony. I shall also take time to attend some of today's presentations. For those of you who are Christians and read the bible, there were two apostles who were scientists because they always wanted evidence before they could believe. When Jesus resurrected, the apostles asked one of the grave attendants where the body was. When Jesus came

back, the apostles told him, “Unless we see the wounds, we will not believe”. So these were scientists.

Before I read the Minister’s speech, let me make these remarks:

The scientists are usually the cream of the Society. I think most of the people who are seated here, were the brightest in their classes. So it is not by choice that you are here today. I don’t think that there are many of you who repeated your classes from P. 1 up to the levels you attained.

Scientists are always called upon to solve unique problems. Let me quote two examples: Last week, there were activities celebrating 60 years of the atomic bomb. During the war between USA and Japan, the USA president called on the scientists to make something that could end the war. Within a few months, the bomb was made and two weeks later, the war was ended. The second example is the development of the small pox vaccine.

Dr. Edward Jenner used observations and came up with something that wiped out small pox. Recently there was a report in the newspaper that Ugandans drink a lot and the scientists have been asked to give evidence to the government whether Ugandans drink more than normal and I am sure Dr. Musisi is on that committee.

Scientific evidence has a strong basis for making decisions and so it is important to realize the role of scientists.

Having listened to many speakers, I am sure the objectives of USHS are to assist young researchers and in this regard the Ministry will support the Society in whatever ways possible. Having said all this let me now read the minister’s speech and once again, I give his apologies.

SPEECH BY HON. MINISTER OF HEALTH, MAJ. GENERAL JIM MUHWEZI AT THE OPENING OF THE UGANDA SOCIETY FOR HEALTH SCIENTISTS' 6TH ANNUAL SCIENTIFIC CONFERENCE

The Patron, Uganda Society for Health Scientists in absentia

The Technical Advisor, Uganda Society for Health Scientists

USHS Advisory Board Members

USHS Executive Board Members

Researchers, Members of USHS, Ladies and Gentlemen.

It gives me great pleasure and honor this morning to officiate at the opening ceremony of the 6th Annual Scientific Conference of Uganda Society for Health Scientists (USHS). I wish to thank Uganda Society for Health Scientists for inviting me to officially open the Conference.

The 6th Annual Scientific Meeting is focusing on "**Malaria, HIV/AIDS and T.B**" focusing on prevention and clinical management, Epidemiology and basic research. As you are all aware, HIV/AIDS, malaria and T.B; continue to be the biggest threats to the stability and economic development of Uganda and Sub Saharan countries. In Uganda, malaria has historically had a serious health problem and currently poses the most significant threat to the health of the population. Currently, malaria accounts for

25 – 40% of all the outpatients' visits at health facilities, 20% of hospital admissions,

9-14% of inpatients' death, a case fatality rate of 3-5% and 23.4 % of total discounted life years lost.

The HIV/AIDS epidemic in Uganda has had a devastating social and economic impact at individual, household and community levels. It is the leading cause of death among the adult population and the fourth leading cause of death among children under five years. In Uganda significant preventive campaigns have led to tremendous behavioral changes. There is however still a lot of research required in the clinical management and epidemiological progression of the epidemic.

Since the emergency of HIV/AIDS in Africa, the incidence rates of T.B have risen dramatically overwhelming National T.B programs in Africa. Over a half of T.B patients presenting to T.B clinics in Africa are HIV infected, often presenting in early stages of HIV infection. In most areas of the world, the battle against T.B is being successfully fought. However in Africa and in Uganda in particular, the disease has reached alarming proportions with a growing number of T.B cases and deaths linked to HIV/AIDS. Uganda ranks 14th among the world's 22 countries with a high tuberculosis burden. In 2001, the Ministry of Health formally adopted the community based T.B care strategy to address T.B services. The approach included a six-step process that districts implements as they design their T.B programs.

Global consensus has been achieved around the interim policy on collaborative T.B/HIV/ activities. However the implementation of joint T.B /HIV activities should accelerate the scale up. Research is very significant for this to happen. It provides guidance on what is to be done.

This meeting is aimed at bringing together all the health scientists who are in one way or the other involved in care and research on HIV/AIDS, malaria and T.B. Researchers will share their findings with fellow scientists at the Conference

I am informed that Uganda Society for Health Scientists' main objectives are to: develop a network of researchers in Uganda and the world in general, provide developmental grants to successful Society members who are involved in conducting research, provide a forum for regular scientific discussions and to share experiences during scientific meetings.

The challenges on the health sector caused by malaria, T.B and HIV/AIDS are enormous. A lot of research and resources are needed to improve the lives of people. I would therefore appeal to the donor community to increase resources for research for malaria, T.B and HIV/AIDS. Researchers and research organization should aim at conducting research that would affect policy in the areas of prevention and care of the 3 diseases. It is upon this background that I would congratulate and thank Uganda Society for Health Scientists for providing a forum for disseminating some of these research findings.

With these remarks, Ladies and Gentlemen, I wish to declare this Conference open and wish you fruitful deliberations.

I thank you for your kind attention.

KEYNOTE SPEECH

GLOBALIZATION AND HEALTH IN UGANDA

Presenter; Dr. Segane Musisi, F.R. C. P, Dept of Psychiatry, MUK Medical School and Mulago Hospital Kampala, Uganda

Globalization includes all those processes whereby issues and concerns emerge that transcend national boundaries, may be influenced by circumstances or experiences in other countries and are best addressed by combined co-operative actions and solutions by all nations of the world. These issues can be positive or negative. Examples include global warming trade, terrorism, etc.

Global health is a new subject of study distinct from individual health or diseases, community health, public health or international health. It analyses the impact of health policy to services and health status of nations. It is linked to economic development of nations: the rich-poor gap. Health is not "soft news". It is at the hard core of societal development. Poor health in one country affects other countries. Health is a defining characteristic of the global society of the 21st century. Universal health is the cutting edge that defines our responsibilities as global citizens.

Globalization impacts on health are bi-directional in all nations. Globalization of disease affects economies: health budgets whereas on the other hand globalization of health solutions helps resolve health problems. Disease maintains poverty and negatively effects growth. The responsibility for health remains primarily national. The determinants of health and the means to fulfill health responsibility are becoming increasingly global. Trusting health as a commodity undermines public and local based solutions and makes people poorer.

Direct impacts of globalization on health include:

- National economies, politics, society influences, households
- Population health level influences i.e. health risks
- Health related sectors i.e. World Trade Organization, TRIPS

Globalization impacts health indirectly too. These include:

- Impact of national economy on the health sector
- Health culture
- Impact of national economy on population health determinants

The world community has agreed to the Millennium Development Goals to halve poverty by 2015. Among the goals, are key health determinants, which include:

a. Eradicate extreme poverty and hunger
b. Achieve universal education
c. Promote gender equality and empower women
d. Improve child health
e. Improve maternal health
f. Combat HIV/AIDS, TB, malaria and others
g. Ensure environmental sustainability: To ensure that development sustains the environment through better natural resource management and increase income and nutrition of poor people.
h. Partnership for development between poor and rich countries.

The main outcome of these goals is to ensure transfer of resources through a commitment to development beyond foreign aid to include trade, investment, migration, peacekeeping and environment. All this has impacted Uganda which is already facing global health challenges in areas such as AIDS –TB- Malaria, mass trauma (wars), population movements, women's health, HIV/AIDS and children, adolescent health, post conflict health, global information and communications technology and health research ethics.

Health is now recognized as a global public good; a human right. The solution to many of the global health issues is to move beyond global charity models to global responsibility and partnership. Global standards for labor, environment and access to medicines and health should be set. The global health priorities that need to be looked into include:

- Fighting the major infectious diseases
- Increasing the capacity and health literacy
- Controlling unsafe goods and products
- Ensuring access to essential medicines
- Creating health infrastructures, surveillance and information systems
- Reforming and strengthening global institutions.

Global health is the key to social justice. It is therefore a challenge to each and every citizen of the world. Without global health, global democracy cannot be realized.

SPEAKERS PRESENTATIONS

MALARIA PLENARY

Effect of HIV infection on response to antimalarial (CQ + SP) treatment for uncomplicated malaria

Presenter: Dr. Pauline Byakika- Kibwika

Introduction: Malaria and HIV infections are known to contribute to significant mortality and morbidity in Sub –Saharan Africa. Annual malaria clinical cases are as high as 300- 500 million, whereas deaths due to malaria are about 1.5- 2.7 million with 90% of these deaths occurring in sub- Saharan Africa. About 29.4 million Africans are infected with HIV (WHO, UNAIDS 2002). It is therefore believed that the interaction between the two infections could lead to profound public health consequences.

Research Question: In view of this interaction, the overriding goal of this study was to determine if there is a difference in response to antimalarial (chloroquine and Fansidar) treatment for uncomplicated malaria between HIV positive and HIV negative patients.

Study Objectives:

- To compare response to antimalarial (CQ + SP) treatment for uncomplicated malaria among HIV+ and HIV- patients aged 18 months and above seen in Mulago hospital
- To compare response among HIV+ patients with low ($\leq$200/ul or $\leq$15%) CD4 counts and those with high (>200/ul or >15%)
- To compare response among HIV+ patients on Septrin prophylaxis and those not on Septrin

Study Methods: It was a prospective cohort study based in Mulago hospital, with cases selected from the Adult and Paediatric Infectious disease clinics and cases selected from the outpatient department at the Assessment centre. The sample size comprised of 90 patients in each arm who were selected by consecutive sampling method. The study was conducted between November 2004 and June 2005.

Findings:

- There was no difference found in response to CQ+SP therapy between HIV + and HIV – patients.
- Temperature at presentation was higher among HIV + patients and a high temperature was a significant predictor of treatment failure
- Parasite density was higher among HIV + patients especially in those with lower CD4 counts.
- Septrin use was associated with increased risk of CQ + SP treatment failure

Recommendations:

- No evidence that antimalarial treatment policy should be different for HIV + patients.
- Need for similar research using more efficacious drugs.
- Need for research on effect of septrin prophylaxis on SP containing malaria treatment regimens using molecular markers of resistance.

Severe malaria in Ugandan Children in areas with low, moderate and high transmission intensity

Authors: Idro R., Aloyo J, Mayende L, Bitarakwate E, John CC and Kivumbi GW

Introduction: Severe malaria is among the most common reasons for hospital admission in Sub Saharan Africa. In Uganda, severe malaria is known to account for 25- 40 % of pediatrics admissions in hospital. Some of the common manifestations of severe malaria include: severe anemia, cerebral malaria and milder degrees of impaired consciousness, prostration, respiratory distress, and hypoglycemia, among others. Age and transmission intensity are some of the factors that influence the manifestations of severe anemia in children. Occurrence of malaria is low in the first 6 months of life and this is attributable to maternal antibodies found in the infants' circulation during this time. Infections with malaria begin to be seen from around 3 – 6 months of age depending on the transmission rate in an area. Transmission rates depend on the rate of anopheline mosquito bites which range from 0.1 per 100/year in Kabale to 140 per 100/year in Busia.

Study Objectives included:

- The examination of how the peripheral parasite load varies with transmission intensity
- How the variation imparts on the symptoms and manifestations of severe malaria in children less than 5 years in 3 areas with different malaria transmission in Uganda

Study Methods: The study was cross- sectional conducted among children with severe malaria admitted in three hospitals in areas with different malaria transmission.

The hospitals included: Kabale Hospital (very low transmission), Mulago Hospital (moderate transmission) and Masafu Health Centre IV in Busia (very high transmission). The study participants comprised of 617 children less than 5 years with severe malaria as defined by the WHO 2000 criteria. Data was collected to identify proportion of patients with previous admissions for severe malaria, those that received antimalarials within 24 hours of fever, children with different manifestations of severe malaria in the different health facilities. The geometric mean parasite density in each area and for each group was determined. The proportion of children with indicators of life threatening illness was also ascertained.

Results:

- Children in Busia, a very high transmission area had more repeated seizures, impaired consciousness, severe anemia(Hb < 5g/dl) and hyperparasitemia (parasite density >20%).
- The frequency of anemia, seizures and impaired consciousness in children with severe malaria increases with parasite load and transmission index.
- Heavy P.falciparum parasitemia may be important in the development of seizures, anemia and impaired consciousness but not respiratory distress.

Recommendations:

- Children in moderate transmission areas may be at increased risk of repeated severe malaria and thus control methods should be employed.

- Proportion of children receiving anti-malarials within the first 24 hours is still very low, increased access to these drugs should be a priority.

Cognitive Deficits Following Cerebral Malaria in Ugandan Children

Authors: Paul Bangirana, Michael J. Boivin, Opika Opoka, Richard Idro, Justus Byarugaba, Chandy C. John

Background:
Different studies have shown that there are cognitive deficits in child survivors of cerebral malaria. However many of these studies were retrospective in nature, hence no documentation of the prevalence of these deficits at discharge. Further more, very little is known about the factors associated with cognitive deficits here in Uganda.

Purpose: To describe the prevalence of cognitive impairment at discharge, 3 and 6 months after discharge and the associated factors in Ugandan children.

Study Methodology: The study employed the use of a prospective cohort design. Cases included children with cerebral malaria aged between 5 – 12 years of which there were 45 and the healthy controls were children also aged between 5 – 12 years of which there were 90.

The assessments carried out included:

1) Kaufmann Assessment Battery for Children (K- ABC)- a sequential processing scale to measure memory
2) Test of variables attention (TOVA) – measure of attention. It scores inattention, impulsivity, response time, ADHD and d'prime score (measure of signal detection sensitivity)
3) Tactual performance test (TPT) – measure of reasoning

Cognitive impairment is defined as impairment in any of the above tests.

4) Middle Childhood Home Observation for the measurement of the environment

Results: Children who suffer from cerebral malaria are a risk of cognitive defects that affect especially the memory and attention. This was demonstrated at discharge and 6 months post discharge. The study also found that children who suffered neurological deficits following a bout of cerebral malaria are more likely to have cognitive deficits.

Recommendations:

- The study should be replicated with a larger population including children less than 5 years.
- Evaluate the effects of cerebral malaria on educational achievement and daily living behaviour and correlate with cognitive scores
- Develop interventions for impaired children and evaluate the effects on the outcome measures mentioned above

Risk Factors for Persisting Neurocognitive impairments following cerebral malaria in children

Authors: Richard Idro, Julie Carter, Greg Fegan, Brian Neville, and Charles Newton

Background

Cerebral Malaria is known to be one the most severe neurological complications of malaria. Patients present with history of fever, seizures and coma. The diagnosis is made in children who present in unarousable coma, have asexual forms of falciparum malaria on the blood smear and who have no other cause to explain the coma. Despite available treatment, mortality due to cerebral malaria is high, greater than 15% worldwide, whereas in Africa the mortality rate is 18.6%. About 11% of the survivors have gross neurological deficits on discharge. The effects of cerebral malaria have been poorly documented due to high mortality rates and limited means of detecting developmental problems in resource poor settings such as Uganda.

Objectives

- Determine the risk factors during admission that are predictive of persisting impairments in children with cerebral malaria.

Study Methods

Retrospective cohort design. The study was conducted at two sites in Kenya- Kilifi and Kisumu. Study participants included children born between 1991- 1995 who at the time of the study were aged between 6 – 9 years. Those previously exposed to cerebral malaria and those unexposed were compared. Measurements included motor skills, cognition (attention, memory, non-verbal functioning speech/language, behavioral difficulties and hearing and vision assessment.

Hospital notes for past medical history, demographic and clinical features during admission were also studied.

Results

One hundred and fifty two children exposed to cerebral malaria and 179 children unexposed were recruited. Both groups had similar age, sex, formal maternal education and paternal incomes.

Independent factors predictive for any impairment after cerebral malaria included: Past history of seizures, profound coma, focal neurological signs and neurological deficits at discharge.

Conclusions

- Persistent impairments are common after cerebral malaria.
- Separate mechanisms of damage are possible.
- Follow up programs for survivors of cerebral malaria that offer long-term assessments for impairments should be set up.
- The above risk factors may be used to select those children who may benefit from intervention programmes.

Clinical Trial To Compare the Efficacy of intrarectal versus intravenous quinine in the treatment of childhood cerebral malaria in Mulago Hospital

Presenter: Jane Achan

Introduction: Intravenous quinine is the drug of choice for the treatment of cerebral malaria. However intravenous treatment is not feasible in some treatment units and intramuscular treatment is associated with complications. Intrarectal quinine is easy to administer and reduces the cost of administration of drug. Previous studies have shown good efficacy and tolerance of intrarectal quinine. However there is very little known on the use of intrarectal quinine in the treatment of cerebral malaria.

Objectives
General: To compare the efficacy and safety of intrarectal quinine versus intravenous quinine in treatment of childhood cerebral malaria
Specific:

- To assess the clinical and parasitological response of children with cerebral malaria to treatment with intravenous quinine versus intrarectal quinine
- To document some adverse events and evaluate the safety of intravenous versus intrarectal quinine

Methodology
The study was a double blind placebo controlled clinical trial. The trial site was the Paediatric emergency unit and the pediatric wards. The study participants comprised children aged 6 months to 5 years presenting at the emergency unit. The study participants were randomized to either intravenous quinine (8 mg/kg in 5% dextrose 8 hourly) or intrarectal quinine (20mg/kg, then after 8hours 15 mg/kg 8 hourly). The outcome measures included: Coma recovery time (CRT), Parasite clearance time (PCT), Fever clearance time (FCT) oral intake, unsupported sitting, duration of intervention and mortality and complications.

Results
There was no difference in the log parasite density between the two treatment arms following treatment. There were no significant differences between arms when assessing the clinical and parasitological responses to the two routes of administration. The overall mortality rate was found to be 8.2%.
Intrarectal quinine was well tolerated, with no rectal bleeding, mucoid stools or diarrhea. Intravenous quinine was also well tolerated. No evidence of hypotension, hypoglycemia or skin rash.

Conclusions

- Intrarectal quinine is as effective as intravenous quinine in the treatment of childhood cerebral malaria
- No adverse events were observed with intrarectal quinine and it was well tolerated.
- The mean duration of intervention was similar in both treatment arms

Recommendations: Intrarectal quinine should be used as a safe and effective alternative to intravenous quinine especially in areas where intravenous therapy is not feasible.

TB PLENARY

The Epidemiology of Tuberculosis in Uganda

Presenter: Dr. Giam Paolo Mezzabotta, Medical Officer, WHO- Uganda

The presentation started off with a reminder from the presenter that TB like all other diseases occurs as a result of the interaction between the etiologic agent, a susceptible host and a favorable environment (overcrowding, poor health, malnutrition and other risk factors). Epidemiology on the other hand is concerned with this interaction, the distribution of disease and with the preventive and curative measures that can be adopted to control, eliminate or eradicate the disease.

Global Targets
In 1991, the world Health Assembly set two targets to be achieved initially by the end of 2000, then moved to 2005:

- To detect 70% of all new smear positive cases
- To successfully treat 85% of these cases

It is hoped that countries achieving and maintaining these targets should see the incidence rate of TB decline by 5- 10% per year (in the absence of HIV).
The Millennium development goals (MDG's) include two indicators related to TB:

- By 2015, to have halted and begun to reverse incidence of tuberculosis
- Between 1990 and 2015, to halve the TB prevalence and death rates.

Global situation of Tuberculosis
In 2003, 193 countries reported to the WHO:

- 8.8 million new cases (all types of TB). 95% of these cases were found in the developing countries, 75% in the (re) productive age group (15-50 years)
- 3.9 million pulmonary smear positive cases (44.3% of the total)
- 15.4 million prevalent cases (all types)
- 6.9 million prevalent cases (smear positive)
- 1.7 million TB- related deaths (including 229,000 deaths in TB/HIV patients). 98% of these in developing countries.

In the same year, TB incidence increased mainly due to an increase in the number of new cases reported by the African region. The Case detection Rate (CDR) in countries that adopted directly observed therapy (DOTS) was 45%. The treatment success rate in the same countries was 82%.

The situation in Africa
In 2003, 510,164 new smear positive cases were detected. This is equivalent to a CDR of 50%. The treatment success rate in 2002 was found to be 71.1% in areas of high HIV transmission rates whereas in areas with low HIV transmission rates it was found to be 74.4%. In 2002, Sub-Saharan Africa had the highest incidence rate (290/100,000) and the highest annual rate of increase (6%).

The situation in Uganda

In 2004, the National TB& Leprosy program (NTLP) reported to WHO the following figures:

- New Cases Detected 42,129
- New pulmonary smear positive 20.986
- New pulmonary smear negative 13,225
- New extra pulmonary 3,469
- Relapses 1,592
- Case Detection Rate 53%

Treatment outcome of 20,310 new smear positive cases detected and treated in 2003:

	#	%
• Cured	6,348	31.3
• Treatment completed	7,006	34.5
• Failure	78	0.4
• Defaulted	3,877	19.1
• Died	1,296	6.4
• Transferred out	1,134	5.6

The presentation ended with questions deemed important for research in tuberculosis, which included:

- How much TB is actually around in Uganda?
- Prevalence of HIV infection among TB patients
- What is the cause of the low percentage of extra-pulmonary TB?
- Why do males account for 60% of smear positive TB cases?
- Distribution of TB related mortality (age, sex, place, education, etc.)
- Prevalence of MDR- TB
- How many defaulters are actually “dead” or “transferred out”?
- Epidemiology of TB in IDP camps

Impact of HIV and TB on body composition among children in Uganda

Presenter: Dr. Ezekiel Mupere

Background
Tuberculosis (TB) is the leading infectious cause of death (3 million annually). TB and HIV are known to be separately associated with malnutrition. TB and malnutrition are associated with reduced survival among HIV-infected subjects. Malnutrition refers to the loss of structural body components accurately reflected by body cell mass (BCM) and an increase of extra- cellular mass. Bioelectrical impedance analyses (BIA) have been shown to be sufficiently precise for clinical investigations of the body components above.
Goal: The main aim of this study was to assess nutritional status among children with HIV/TB co- infection using BIA and anthropometry measurements.

Objectives:
- To determine the effect of HIV and TB on the body composition parameters
- To determine the influence of age on body composition parameters

Methods: This was a cross-sectional descriptive study. Study participants were recruited from the ongoing Kawempe Community Health study (KCH). All index participants and contacts were screened for HIV and TB, nutritional status was assessed using bioelectrical impedance analysis (BIA) and anthropometric measurements (weight, height and body mass index (BMI)).

Results:
- Comparison of anthropometric and BIA measurements among healthy, TB positive and HIV positive children less than 5 years of age found that those with TB had significantly lower weight, were stunted, anaemic with low body fat and had a high proportion of participants with a lower phase angle.

- There were no statistical differences between PPD positive and negative children both below and above 5 years of age when the BIA and standard anthropometric parameters were compared.
- Females, with age increase in age were found to have higher body mass index and body cell mass than males. This peaked especially at puberty.

Conclusions and Recommendations
- TB appears to exacerbate already existing malnutrition
- BIA is a useful tool to complement the standard anthropometric evaluations
- TB treatment should be combined with nutritional interventions
- Further studies should be conducted using BIA to determine whether the phase angle and haemoglobin are useful predictors of clinical outcome among HIV infected persons with TB

Transmission Dynamics of Tuberculosis in Ugandan Households: 1995-2005

Presenter: Christopher Whalen, M.D., M.S., Uganda –Case Research Collaboration

This study aimed to determine the risk for acute infection (also known as the secondary attack rate of infection) and the risk of disease after acute infection (also known as the risk of progressive primary disease) in Ugandan households. The secondary attack rate (SAR) in a household is defined as the probability that a susceptible individual living in the same household as an individual case will become infected.

This was achieved through a prospective cohort study of 1,206 household contacts of 302 index cases with tuberculosis enrolled in Uganda between 1995 and 2005. Restriction fragment length polymorphism (RFLP) was used to determine who the secondary cases were following a contact with a primary case. RFLP is a method which helps to distinguish between different strains of the organism and this it does by analyzing the DNA fingerprint of the infectious organism. If the fingerprints of the organism are found to be the same, chances are that the contact has been infected by the same strain the index case in the home has.

Results

The risk for secondary tuberculosis was greater among young children than adults (10% vs. 1.9%) and among human immunodeficiency virus-seropositive than -seronegative contacts (23% vs. 3.3%). BCG vaccination seemed to decrease risk of disease but not infection. From the data and the interesting discussion that followed, host risk factors could not be completely separated from the effects of environmental risk factors, suggesting that a household may represent a complex system of interacting risks for tuberculosis. It was clear from Dr. Whalen's presentation that, as one of the world's most common infections, TB transmission dynamics in Ugandan households followed a complex path.

An evaluation of the activity and tolerability of Moxifloxacin during the first two months of treatment for pulmonary tuberculosis: TBTC Study 27

Presenter: Dr. Grace Muganje

Background: Animal studies have shown that treatment of murine tuberculosis with Moxifloxacin was more effective than either Ionized or a combination of Isoniazid and Moxifloxacin especially in the first month of treatment. To this effect this study was designed to assess the activity and tolerability of Moxifloxacin during the first two months of treatment.

Study Design: Double blind placebo controlled factorial study. Randomization was to study drug (either Moxifloxacin or Ethambutol) and to treatment frequency (daily dosing or intermittent (three daily) dosing). Each participant was treated with standard TB treating regimen consisting of Isoniazid, (I) Rifampicin (R) and Pyrazinamide (Z) with either addition of Moxifloxacin (M) or Ethambutol (E) as shown in the table below.
Three hundred and one participants were evaluable for this analysis.

Placebo Controlled, Factorial Study Design- Randomization to study drug and treatment frequency

Study Drug	**Treatment Frequency**	
Moxifloxacin	HRZM Daily	HRZM Intermittent
Ethambutol	HRZE Daily	HRZE Intermittent

Randomization was stratified by presence of cavitation on chest x-ray and by region: Africa versus North America.
The primary endpoints studied included:

- Efficacy – 2 month culture conversion, after than ≥ 40 daily or > 28 thrice weekly doses administered in ≤ 70 days, all directly observed
- Tolerability – completed 2 months of study regimen

Secondary endpoints included:

- Time to culture conversion
- Toxicity attributed to study therapy

Results:

There was no statistical difference overall on the analysis of the effect of Moxifloxacin and dosing frequency on 2 month culture conversion. However between 4 and 6 weeks of treatment, the Moxifloxacin containing regimen had significantly higher rates of sputum culture conversion than the Ethambutol containing regimen. However at the end of two months of treatment there was no difference between the two treatment regimens.
Multivariate analysis showed that presence of cavities, being enrolled from the African region, haemoglobin levels and use of Moxifloxacin containing regimen were factors affecting the time to culture conversion.

Recommendations

Further evaluation is needed to explain why African patients have low culture conversion rates by comparison of severity of chest x-ray findings and pharmacokinetic studies among these patients.

HIV PLENARY

Cellular Signature of Human Immunodeficiency Virus (HIV) Induced Impairment of the Innate Response in HIV and Malaria Co-Infected Individuals

Presenter: Dr Alex Ogwal

Introduction
Malaria and HIV are both major global health problems. There seems to be an interaction between the two infections but how and to what degree is unknown. It is thought that HIV could reduce immunity to malaria via T- cell depletion leading to frequent infections. HIV infection could also induce immunological and functional abnormalities in phagocytes. Malaria on the other hand may enhance progression to clinical AIDS via activation and raised concentration of pro-inflammatory cytokines.

Hypothesis: HIV induces impairment of the innate response that might affect the phagocytes properties of peripheral monocytes and neutrophils in resolving malaria infection. This impairment is evident by absence of malaria pigment in peripheral monocytes and neutrophils.

Methodology: Study participants were recruited from Paediatric and Adult Infectious Disease Clinics and the Malaria Clinic. Fifty-one exposed (malaria and HIV) and 50 unexposed (Malaria alone) were recruited. Sampling was carried out using positive peripheral blood slides. Laboratory investigations included: HIV1 and 2 screening, malaria diagnosis and speciation, parasite density estimation and malaria pigment carrying phagocytes.

Results
- Parasite density was higher in participants who had dual infection (malaria and HIV), than in those with malaria infection alone. However this difference was not of statistical significance.
- The level of pigment carrying leucocytes was significantly higher in participants who had only malaria infection. It is thought that in those who were dually infected the pigment carrying leucocytes (monocytes and neutrophils) were impaired by the HIV infection hence unable to neutralize effectively the malaria parasites.

Recommendations
- Functional studies need to be conducted to establish the mechanism of impairment in HIV infection
- The results from this study should trigger further assessment of monocyte and neutrophil phagocytosis as a powerful tool predicting and managing opportunistic infections in HIV infection

Bioavailability and Pharmacokinetics of Generic and Brand Combination Formulation of Zidovudine and Lamivudine Antiretroviral Drugs Currently Used in Uganda: A comparative study

Authors: Celestino Obua, Richard Odoi Adome, Patrick Ogwang Engeu, Dept. of Pharmacology and Therapeutics, Faculty of Medicine, Makerere University

Introduction

HIV/AIDS is a major world pandemic with and estimate of 39.4 million infected (WHO, 2004). In Sub- Saharan Africa it is estimated that there were about 25.4 million people HIV infected (WHO, 2004). In 2003, UNAIDS estimated that in the developing countries 5-6 million adults needed antiretroviral therapy, however only 0.3 million were on it. In Uganda only about 15% of those who required this therapy were on it. This has led to the use of generic drugs, which are much cheaper ($480 per year) compared to the brand formulations ($1000 per year). However, the use of generic drugs has brought about issues of concern, which include: the quality of the drugs and also the users' low opinion of generics.

Objectives:

- To determine and compare the generic and brand formulation, drug contents, bioavailability and other pharmacokinetic parameters
- To disseminate the findings to stakeholders
- To establish baseline antiretroviral therapy quality monitoring system and contribute to provision of good quality generic antiretroviral.

Methodology

This involved:

a. Determination of chemical analysis (drug content) using the average weight method and the individual content method
b. Determination of bioequivalence
c. Plasma drug analysis

Participants were recruited and screened. The drugs were administered and blood collected after some time. The plasma was stored at -20°C. There was a crossover phase (2 weeks) to allow for washout so that the two types of drugs (generic and brand) would have no effect on each other. The drugs that were compared were Bivir (generic – Lamivudine and Zidovudine) and Combivir (brand – Lamivudine and Zidovudine)

Results

- Drug or chemical content of the generic drugs was found to be similar to that of the brand drugs and fell well within the acceptable range.
- The generic formulation was also demonstrated to be bioequivalent to the brand formulation using both the Food and Drug Administration (FDA) and WHO criteria.
- Plasma analysis showed that brand formulations get to peak levels faster than the generic formulations, but this was not of any statistical significance

Recommendations

- Bivir (generic) may be used as an alternative to Combivir (brand)
- There is need for continued pharmaco-vigilance to avoid poor quality generics flooding the Ugandan market.

Effectiveness of Nevirapine (NVP) and Zidovudine (ZDV/AZT) for PMTCT in Uganda.

An application of propensity score analysis for handling bias in observational studies

Presenter: Dr Harriet Kose Kayanja

Introduction

Clinical trials have demonstrated efficacy of antiretroviral therapy to prevent maternal to child transmission of HIV. Positive results from the clinical trials of short course AZT and NVP created the possibility of offering affordable and feasible intervention to prevent maternal to child transmission of HIV. However, the effectiveness of these drugs has not been assessed in a program setting, which is observational in nature.

The propensity score is the probability that a subject would have been assigned a particular arm or treatment to adjust the treatment effect hence creating a quasi-randomized experiment. It is supposed that subjects with similar scores were randomly assigned to each group in the sense of being likely to be treated with either intervention.

Objectives

- To determine the effectiveness of AZT and NVP in the program setting (observational study)
- To compare the effectiveness of short course AZT versus Nevirapine for PMTCT

Methods

The study design was that of a retrospective cohort with the study population being HIV positive women enrolled in the PMTCT program at Nsambya Hospital. Th**is** site was chosen because the data was complete and the setting was more management based than research based the exposure of interest was short course AZT or NVP. The propensity score was used to determine the conditional assignment to particular treatment given a set of observed covariates.

Results

- Short course Nevirapine or AZT in the program context were effective in reducing HIV transmission from mother to child.
- After adjusting for predictors of treatment assignment and other known risk factors, risk of transmission of HIV from MTCT, when among women treated with short course AZT tended to be higher relative to single dose Nevirapine.

Recommendations

- Future studies should look into combination short course therapy, which maximizes the efficacy of AZT and NVP in the PMTCT program.
- Strategies that protect NVP but adequately protect the infant from HIV infection need to be explored.

Options for providing antiretroviral therapy among HIV positive clients in Kabarole District, Uganda

Presenter: Dr.Solome Nampewo

Introduction

Currently there are 64,000 people accessing ARV's in Uganda. In order to increase access to ARV's among people living with HIV/AIDS, various options need to be formulated. Kabarole started two ART programmes in 2003 with the support of MoH, GTZ and JCRC. In 2005, two new ARV sites were opened in two NGO hospitals. However, it has been shown that of the 6464 people with advanced HIV/AIDS only 600 are accessing ARV's in Kabarole

Objectives:

- To explore alternative options for provision of ARVs in order to ensure continuum of care for clients on ARVs
- To establish alternative modes of distribution of ARVs to people living with AIDS.

Methods

This cross sectional study employed qualitative methods of data collection and was carried out in Buhinga, Virika hospitals as well as communities with posttest clubs. The study population included clients on ARVs for the past 6 months and care givers of clients on ARVs. Focus group discussions (FGDs) were employed for data collection.

Results

The average period on ARVs among FGDs was 9 months. All FGDs requested that ARVs be brought nearer to them because lack of transport might inhibit them from coming to get ARV refills as appointed; for example by providing ARVs at health centers in sub counties.

Access to ARVs in health facilities present many challenges and it was noted that alternative options for provision of ARVs are available. Health workers and community resource persons were identified as stakeholders in provision of ARVs.

Recommendations:

- The MoH should scale up ARVs to lower health units in order to improve access by people living with HIV/AIDS (PLWAs)
- There is need to adopt cost effective strategies to initiate and follow up clients on ARVs.
- Need to develop a system that tracks clients on ARVs in order to reduce dropouts.
- Involvement of community resource persons (e.g. CBOs and community health volunteers) will assist in improving the ART programme.

PLENARY ON RESOURCE MOBILIZATION FOR RESEARCH IN MALARIA, TB, HIV/AIDS

Global Fund for Malaria, TB and HIV/AIDS

Presenter: Dr. Tiberius Muhebwa

The Global Fund project believes that research is an important and much needed component required in treatment and care programmes. Research funding that comes through the ministry of health is part of the health sector. Funds are raised from World Bank loans, local and foreign aid, grants from global health financing institutes.

It is realized that there is a low level of biomedical research in Uganda. This results from unclear policies, fragmented research being conducted all over the country and not being coordinated by departments set up to look into some of the diseases around Uganda. For example, it is well known that there is a lot of malaria research being carried out all over Uganda. However, not all the research is being carried out through the Malaria Control Programme. Lack of funding and resources, low capacity is all also other factors, which hinder the progress of research.

The global fund for malaria, TB and HIV/AIDS was set up for countries that could send in sound proposals, which would be assessed for funding. The global fund project in Uganda is currently funding programmes through the ministry of health. The funding is mainly to help with implementation programmes and some aspects of research are included. The research that is mainly carried out is operational in nature. The Global Fund is not accessible to individuals but to organizations like the Uganda Society for Health Scientists that could come up with a research agenda, which may be submitted, to the Global Fund Project when applications are requested for.

Uganda has so far received funding as shown below through the Global Fund Project:

- HIV/AIDS Grant – 33.6 M received in 2003, further 15.6 M expected depending on performance
- TB Grant – 49.6 M over two years
- Malaria – 23 M
- Orphans and Vulnerable Children And Antiretroviral Therapy – 70.35M

The funding above has been through the AIDS Control Program

The Malaria Control Program has received 66.4 M to fund malaria programmes.

DEPARTMENT FOR INTERNATIONAL DEVELOPMENT (DFID)

Introduction

DFID believes that operational research is an integrated component of treatment and care programmes- learn by doing and build the evidence base. To this end DFID believes in evidence-based policymaking and has supported nationwide processes designed to build the evidence base e.g. NIMES, PPAs, etc.

Resource mobilization involves knowing and going around the basics (e.g. identifying the potential sources, their funding priorities, criteria and cycle of each prospective funder, and making a strong case to justify why you should be funded.

DFID Approach

- Working with other development partners to ensure development assistance reflects country owned priorities
- Supporting the development of country systems to ensure ambitious poverty reduction strategies can be realized
- Using government systems to deliver development assistance
- Harmonizing and aligning donor support to reduce high transaction costs of Aid to poor countries
- Assessing progress on the basis of targets and indicators agreed at country level

In Uganda and consistent with the thinking above, PGBS is DFID's main aid modality that supports PEAP implementation- achieve Uganda's development targets e.g. macro-economic stability, human development, peace and security, good governance and accountability and enhancing access to basic services.

DFID recognizes that government cannot achieve the country's development vision alone but has to work in partnership with other actors including the private sector and civil society organizations (CSOs).

Possible Sources of Funding for CSOs

CSUP – Civil society Umbrella Programme

- The bulk of support to CSOs in Uganda is channeled through the CSUP
- The aim of the CSUP is to enhance efforts to support the voice and accountability side of PEAP implementation
- There are four broad objectives for working with CS under the CSUP:
    a. To facilitate CS/GoU dialogue on pro-poor policy processes
    b. Support CS capacity building efforts to enhance effectiveness in engagements with government in policy development and monitoring
    c. To promote lesson learning among CSO's and how these lessons are used to influence policy
    d. To ensure a conducive environment for effective CS/GoU partnerships

Themes for CSUP:

- Policy development
- Monitoring policy implementation
- Rights awareness

Specific support extended to CSOs

- Provide grants to successful CSOs
- Offer capacity building and monitoring and evaluation support to grantees and some non grantees
- Support other processes looking at operating environment of CSOs

Grant Making Mechanism

Grants to CSOs are accessed through a public call for proposals. CSOs can apply for grants ranging from 1-3 years. Last year one could access a grant up to 1 billion Uganda shillings. There is no call for proposals this year but it is anticipated that there will be one in 2006.

Who qualifies for DFID grants under CSUP?

- All CSOs (NGOs and CBOs, Networks, Trade Unions, Faith Based Organizations, Research Institutions, Media Organizations) working on the themes mentioned above.
- Only CSOs legally registered as not for profit organizations
- Organizations must have been in operation for at least one year
- CSOs involved in policy development and monitoring its implementation

Management of CSUP

1. CSA – provides day to day oversight of the programme
2. Steering Committee – makes key decisions on who can be funded (composition- EU, DANIDA, DFID)

Other potential sources

DFID is working with other donors like DCI to establish a new support mechanism for HIV/AIDS service delivery to CSOs. It is not yet clear whether the support should be limited to service delivery or extended to other areas like operational research to build the evidence base.

Other institutions include:

- EU-ACP Civil Society Capacity Building Programme – Includes support for innovative service delivery and policy advocacy
- Global Fund for HIV/AIDS, TB and Malaria
- UPHOLD (Research Unit – interest in malaria and HIV/AIDS
- AIM (HIV/AIDS)

Funding for Research: Opportunities from Elizabeth Glaser Pediatric AIDS Foundation

Presenter: Dr Edward Bitarakwate

The Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) has functioned for 15 years as a public U.S. not for profit charity with extensive experience in pediatric HIV/AIDS. It has funded activities in Uganda since 2000. Through research and implementation and training programs, combined with domestic and international advocacy efforts, EGPAF has demonstrated comprehensive leadership in the fight against mother to child transmission of HIV, and ensured better medical treatments for children with serious and life threatening diseases.

The foundation identifies research priorities by consulting with internationally renowned investigators in AIDS research and related fields. Applications solicited for innovative ideas in the areas of study determined to be of high priority. Every proposal submitted to the foundation is reviewed by a carefully selected scientific review board, representing diverse areas of subspecialty. All applicants funded by the foundation are required to submit detailed reports of research accomplished, which are subsequently reviewed by the scientific advisory boards.

Categories of Research Awards

- Targeted Research Program – relevant to HIV vaccine issues
- Two year scholar awards
- Two year International Scholar awards
- Elizabeth Glaser Pediatric scientist awards
- International Leadership Awards

Applications for each program are available for download at the beginning of each grant cycle at research@pedaids.org

ANNUAL GENERAL MEETING

AGENDA:

1. Chairman's report
2. Treasurer's report
3. Elections of new executive board

Chairman's Report by Prof. J. Konde Lule

Objectives of USHS

- Develop a network of researchers in Uganda
- Promote scientific exchange
- Develop young investigators
- Conduct research as a society
- Become a resource for research activities
- Mobilize resources for sustainability

Achievements (2003-2005)

1. **Membership:** Society membership has grown from 250 in July 2003 to 283 July 2005 currently.
2. **Resource Centre:** The USHS runs a resource centre that is continuing to expand.
3. **Newsletter, Brochure and Flier:** The Society produced a newsletter, a flier and an updated brochure.
4. **Annual Scientific Meeting:**
   In July 2003 at Hotel Africana 207 participants
4. In July 2004 at Grand Imperial Hotel 102 participants attended.
5. **Support to members attending International AIDS conference:** USHS supported 1 of its members to attend the 15th International AIDS Conference (July 2004 Bangkok Thailand.
6. **Research Methodology Workshops:**
   Sep 18th & 19th 2003, 38 participants attended.

✓ On Nov 19 & 20 2003, 17 participants attended the workshop.
✓ May 31 – 1st June 2004, 19 participants attended the Data Analysis workshop.
✓ July 26 & 27, 27 participants attended the Writing skills workshop.
✓ Nov 29- 1 Dec 2004, 16 participants attended the workshop.
✓ March 17 –19 2005, 14 participants attended the Data Analysis workshop.

7. Scientific Lectures/Journal clubs
   - ✓ USHS has organised over 30 lectures and journal clubs.
   - ✓ Topics range from Human rights, PMTCT, Cancer, Health care, Vaccine trials, ABC, Adherence and Social issues.

8. Serinya Project: This is administered by USHS. The project was officially opened on 28th February as the first private primary school in Kalangala district and currently there are 104 pupils in the primary school and the health care centre is also operational. It has a headmistress, four teachers and a school nurse.

9. The secretariat has expanded and now we have a full time technical scientific officer.
10. Website is running.

Sources of funding:

- ✓ AIDS International Training and Research Programme (AITRP) at Case Western Reserve University (major source of funding
- ✓ Membership fees
- ✓ Charging overhead (indirect) costs on activities organised through the society such as conferences and workshops
- ✓ Renting out equipment like the LCD projector, the laptop and the overhead projector
- ✓ Registration fees
- ✓ Serinya project where overheads are charged

Challenges:

- ✓ Limited resources to support young scientists.
- ✓ Further growth of the society to become an internationally recognised entity.
- ✓ Inadequate space for USHS secretariat and resource centre.
- ✓ Strengthening linkages and collaborations.
- ✓ Limited interaction between members.
- ✓ Unpaid membership fees.

Conclusion:

So far, so good. USHS has done well. There are challenges to overcome and opportunities to seize. I welcome your comments, critiques and suggestions on how to make the society have a greater impact. I thank all of you members of the society for your commitment to the objectives of the society. My special thanks go to Dr. Chris Whalen for his technical advice and financial support. We look forward to the future with confidence as we work together for better health of all Ugandans. For God and my country.

Treasurer's Report by Dr. Fred Nuwaha

SOURCES OF INCOME

- ✓ AIDS International Training and Research Programme (AITRP) at Case Western Reserve University (major source of funding) USD 91,807
- ✓ Membership fees 3,796,800/=
- ✓ Renting out equipment like the LCD projector, the laptop and the overhead projector 814,000/=
- ✓ Sale of T-shirts 526,000/=
- ✓ Serinya project 7,000,000/=
- ✓ Registration fees 1,484,500/=

EXPENDITURE 2003-2005

- Executive Board Meetings - 8,065,700/=
- Scientific lectures/journal clubs - 8,442,900/=
- Research methodology workshops - 32,475,900/=
- Annual Scientific Conferences - 38,649,650/=
- International AIDS Conferences - USD 3500.
- Journal subscriptions - 2,757,000/=
- Office equipment and maintenance - 14,449,170/=
- Office space - 8,067,500/=
- Newsletter and printing - 5,814,400/=
- Staff Training - 2,180,000/=
- Petty Cash - 2,600,000/=
- Salaries - USD 23,956
- Telephone - USD 2,848.28

ACHIEVEMENTS (2003-2005)

- ➢ Audited financial report from July 2003 to December 2004
- ➢ Accounting package quick books installed and admin secretary trained to use it.
- ➢ Able to accomplish all our activities in the given time line.
- ➢ Recruitment of a Programme Officer

CHALLENGES (2003-2005)

- ✓ Limited Sources of Income.
- ✓ Unpaid membership fees 5,353,200/=

ELECTIONS

The elections were presided over by Dr. Simon Luzige. He thanked all those that served on the outgoing executive committee for the work well done. The outgoing executive committee comprised the following:

1. Prof. Joseph Konde - Lule - Chairman
2. Dr. Margaret Muganwa - Vice chairperson
3. Dr. Lorna Nshuti - Secretary
4. Dr. Fred Nuwaha - Treasurer
5. Dr. Harriet Mayanja - Member
6. Dr. Moses Kamya - Member
7. Hon. Dr. Elioda Tumwesigye - Member
8. Dr. Alphonse Okwera - Member
9. Dr. Israel Kalyesubula - Member
10. Ms. Jayne Byakika Tusiime - Member

The following persons were elected on the new Executive Board

1. Ms. Jayne Byakika Tusiime - Chairperson
2. Dr. Fred Nuwaha - Vice Chairman
3. Dr. David Meya - Secretary
4. Dr. Lorna Nshuti - Treasurer
5. Dr. Harriet Mayanja - Member
6. Dr. Pauline Byakika - Member
7. Dr. Denise Njama Meya - Member
8. Dr. Carol Onyango - Member
9. Mr. Simon Kasasa - Member
10. Dr. Kenneth Kintu - Member

The outgoing Board members were thanked for all their input in making the Society a success. The new members were congratulated on being elected and handed over to the new Chairperson Ms. Jayne Byakika Tusiime. The new Chairperson on behalf of the Executive Committee pledged to work very hard to help the Society grow and called for everybody's support in realizing the objectives and dreams of the Society.

EVALUATION OF THE ANNUAL CONFERENCE

In order to assess and evaluate the expectations of the participants at the annual USHS conference an evaluation form was passed around. The evaluation focuses on the following:

1) Logistics – venue, food, administrative support, responsiveness of organizers
2) Aspects of the programme which focuses on the presentations, their adequacy and relevance to the theme of the conference

The evaluation form is as shown below:

EVALUATION FORM

Please circle as follows: a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

Day 1

LOGISTICS

1. Venue

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

2. Food

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

3. Administrative support

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

4. Responsiveness of organizers

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

THE PROGRAM

1. Keynote address; Globalization and Health in Uganda

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

2. Cognitive deficits following cerebral malaria in Ugandan children

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

3. Risk factors for persisting neuro – cognitive impairments in children after cerebral malaria

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

4. Severe malaria in children under five years in areas with low, moderate and high transmission intensity in Uganda

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

5. The effect of HIV infection on response to chloroquine plus sulphadoxine – pyrimethamine treatment for uncomplicated malaria in Ugandan patients

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

6. Pharmacokinetics of chloroquin and sulphadoxine/pyrimethamine in health volunteers: A comparative study of formulation combination

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

7. A clinical trial to compare the efficacy of intrarectal versus intravenous quinine in the treatment of children.

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

8. The Epidimiology of T.B in Uganda

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

9. The effect of HIV infection and Tuberculosis on body composition among children in Uganda

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

10. Efficiency of sputum microscopy in the diagnosis of T.B in Moldava and Uganda

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

11. Efficiency of sputum microscopy in the diagnosis of T.B in Moldava and Uganda

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

12. An evaluation of the activity and tolerability of moxifloxacum during the first 2 months of treatment for pulmonary tuberculosis

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

13. Cellular signature of human immunodeficiency virus induced impairments of the innate response in HIV and malaria co infected individuals

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

14.Pharmacokinetics of generic and brand combination formulation of Zidovudine and Lamivudine antiretroviral drugs currently used in Uganda

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

15. Effectiveness of short course zidovidine and Nevirapine for PMTCT of HIV. An application of propensity score analysis for handling bias in observational studies

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

16. Options for providing antiretroviral therapy among HIV positive clients in Kabarole District in Uganda.

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

17. Plenary on Resource mobilization for Research for Malaria, T.B and HIV/AIDS

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

18. Posters

a) Very Poor, b) Poor, c) Average, d) Good, e) Excellent

EVALUATION OF THE CONFERENCE

	V.Poor	Poor	Average	Good	Excellent
Logistics					
Venue			13%	57%	30%
Food			9%	64%	27%
Administrative support	02%	02%	20%	52%	24%
Responsiveness of organizers		02%	17%	52%	29%
Aspects of the Programme					
Keynote address; Globalization and Health in Uganda		02%	08%	34%	56%
Cognitive deficits following cerebral malaria in Ugandan children			22%	67%	11%
Risk factors for persisting neuro – cognitive impairments in children after cerebral malaria		02%	15%	68%	15%
Severe malaria in children under five years in areas with low, moderate and high transmission intensity in Uganda		05%	10%	68%	17%
The effect of HIV infection on response to chloroquine plus sulphadoxine pyrimethamine treatment for uncomplicated malaria in Ugandan patients			10%	60%	30%
A clinical trial to compare the efficacy of intrarectal versus intravenous quinine in the treatment of children		02%	02%	57%	41%
The Epidimiology of T.B in Uganda			25%	57%	18%
The effect of HIV infection and Tuberculosis on body composition among children in Uganda			32%	60%	08%
Efficiency of sputum microscopy in the diagnosis of T.B in Moldava and Uganda		05%	19%	57%	19%
The Transmission of T.B in Ugandan household			12%	49%	39%
An evaluation of the activity and tolerability of moxifloxacum during the first 2 months of treatment for pulmonary tuberculosis Cellular signature of human immunodeficiency virus induced impairments of the innate response in HIV/AIDS and malaria co – infected individuals		08%	05%	74%	13%

Effectiveness of short course zidovidine and Nevirapine for PMTCT of HIV. An application of propensity score analysis for handling bias in observational studies			21%	49%	30%
Options for providing antiretroviral therapy among HIV positive clients in Kabarole District in Uganda.			12%	68%	20%
Plenary on Resource mobilization for Research for Malaria, T.B and HIV/AIDS		02%	33%	52%	13%
Posters	02%	09%	26%	54%	09%

Additional comments from the participants included:

- Participants should be given certificates of attendance
- Posters were good though too few. There is need to include more posters next time
- Administrative support was not good enough especially towards the end; there was no microphone

ATTENDANCE LIST AT THE 6TH ANNUAL SCIENTIFIC CONFERENCE

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