



The World Federation of
WFNN | Neuroscience Nurses



International Brainwaves

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Welcome to the WFNN Newsletter. We look forward to seeing all of you at the 10th Quadrennial Congress next May 23 - 29, 2009 in Toronto, Canada www.wfnn2009congress.ca. Happy Holidays to all.

"Cameroon West Africa: Orphans and Epilepsy"

Dear Members of World Federation of Neuroscience Nurses (WFNN):

I am Ambanibe Jerome Akeneck, a nurse, and social worker based in Cameroon West Africa. Currently I am doing an Advanced Diploma in Mental health management (distance study) with Trans Atlantic College UK. I have a nine years experience in grassroots management of a non-Governmental organization called Association of Orphans and the Disabled (ASODI) an organization which I founded in 1999 to take care of Orphans, epilepsy patients and the disabled. Currently we care for 2500 orphans some of whom are epileptic; 1300 epilepsy patients and 500 disabled. We just ended the first phase of a biomedical research project on epilepsy patients in Ngie in which Irene Elliott is one of the investigators.

Neuroscience nursing in Cameroon is still a new concept especially in the rural areas where only few or no nurses will venture into. Most people who are epileptic tie it to delusions and have lots of psychotic feelings which they associate to witchcraft, ill luck etc. They seem not to see it from a medical point of view but for our timely sensitizations. In Momo Division where I work, one out of every twenty young persons are epileptic. The actual causes are not known. One out of 15 households in some sub divisions in others one out of two households have an epilepsy patient.

It is pathetic to know that most of the patients are youths who also suffer from some sort of bulimia and psychopathology.

Information and compassionate health personnel are rare but for outreach packages I got from Irene and Co in Toronto, Canada.

We lack funds, infrastructures, and volunteers to assist us in the free Phenobarbital treatment which we have operated on over 1300 patients for 5 years now. We also hold seminars and workshops, in which we educate about the disorder. It is lethargic for us each day to go about this in poor roads infrastructures and no means of movement as we do it trekking.

Sixty-four deaths have been recorded so far as a result of epilepsy due to burns, suffocation, and drowning.

I feel so elated to be a member of WFNN so that I can update my skills, meet new friends /colleagues, share ideas and opinions and of course gain partnership with other people in the world

May God bless us all.

Ambanibe Jerome Akeneck

Cuba: Nursing Activity at CIREN's Clinical Neurophysiology Service

Nursing constitutes one of the most important basic health services at International Center for Neurological Restoration (CIREN), where sick individuals are assisted in tasks that contribute to the patient's health or recovery when one is in no condition to do it by themselves. This is why attention is important when dealing with individuals or their family as well as with all citizens. Health protection has always been a constant preoccupation for all societies that have tried in diverse forms, to solve in an orderly way, the problems concerning health.

In Cuba, the laboratory net for the clinical neurophysiology in the capital and the provinces is extending widely- a fact that has brought with it- an increase in the participation of the nursing personnel when performing different techniques. The incorporation of these personnel frees doctors from the necessity of conducting registers by themselves. The nurse's work in this speciality is much more independent in reference to the necessity of a solid theoretical and practical preparation. Nurses have an important basic knowledge in the quantity and quality of the information each test offers- which signals are registered. This technical rigor depends on factors related to the equipments own characteristics, the place where it is located, state of consciousness and the patient's level of cooperation. Not to mention the technician or assistants skill and dedication to guide them. The patient's importance lies in the integration into these disciplines- a fact that needs a deep knowledge of the nervous system.

The observation of its functionality is registered in the equipment evoked potentials test for its study and abilities, and so much in its performance as the interpretation of the results contributes to the patient's better diagnosis.

The nurse is not simply an equipment operator that fulfils working routines, but a person who knows what they are doing by interacting with the patient to guarantee that the obtained register is capable of generating the maximum of suitable information. This knowledge not only includes the adequate mastery of the registering technique, but also to main EEG and PE semiologic characteristics, in such a way, that the nurse can make decisions during register as to modify its course in relation to the patients degree of cooperation, her clinical status or the obtained result. For that reason, the nurse must have an exact idea of the EEG visual composition and frequency as well as evoked potentials through different encephalic regions, symmetry of its distribution, simultaneous appearance of EEG features in homologous regions of both hemispheres and characteristics of the base activity.

These aims cannot be fulfilled unless technical deficiencies including the patient's cooperation are detected or eliminated, which can make registering difficult and thus as a consequence, limit the possibility of making a good interpretation of its planning. Such deficiencies appear in the registers rapid changes in the base activity-known as artefacts that do not have a brain cortical origin as the waves that form part of the EEG and PE base activity.

At present, there are nurses in these services that are capable of performing such techniques and also of interpreting the results under the supervision of the neurophysiologist in such service like telemetry composed of 3 nurses-as their work is useful as constant observers of the patients epileptic seizures. These seizures are studied with very many diverse epileptic diagnoses, as one nurse can perform electroencephalograms in their diverse modalities; there is also a nurse that performs electromyography techniques, as well as the evaluation of the autonomous nervous system. Such nurses have a great experience in conducting these specialties-they have accomplished autonomy as to the neurological diseases and illustrate their results through publications.

At our clinical service of neurophysiology, internal scientific events are also performed. Conferences on techniques of such pathologies treated at CIREN are also presented, such as: epilepsy, disautomies, vascular encephalic accidents and carpal tunnel syndrome among others, where other

imaging diagnosing methods for clinical application are also presented. Therefore offering information on the recent pathologic status of the nursing personnel at CIREN is a very good one. Since 1999 up to 2007, twenty-eight articles have already been published. Every time more nurses show their experience through papers that describe their actions on different patients that daily attend the hospital. Publications in renewed journals include: *The Role of Nursing, Nursing Goals, Global Nursing, Med ware*, as well as *résumés* published in international events of great prestige.

It constitutes a great commitment for all, as never before have we had publications where the nurse's experience in the specialties of neurology and neurophysiology are shown. This is one reason why work has been performed in the education and orientation of nurses as to the publication of scientific papers and results on such complex pathologies.

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International Center for Neurological Restoration (CIREN)

Tanzania: Building Capacitance in Neuroscience Nursing

One important thing to always remember when going to another country to help is to work within their abilities. I come from a country rich in healthcare technology. I had to step back and learn what is reasonable to introduce in their environment and to work within their resources. Often those of us who want to help become frustrated by the lack of technology and capabilities. We need to remember to step back, observe, learn from our colleagues, and teach concepts. We need to help them find solutions that work in their environments. I have met some amazing nurses who are now my friends. I look forward to working with my Tanzanian colleagues to change their abilities to care for these patients. I am looking for international friends to help as well.

In January 2008, I joined a multi-disciplinary team in Dar es Salaam, Tanzania to develop a plan to build capacitance for the care of the neuroscience patient. At present, there are 3 Neurosurgeons for 40 million people in Tanzania. They are all located in Dar es Salaam at Muhimbili

Orthopedic Institute which is part of Muhimbili National Hospital. The World Health Organization suggests that there should be 1 Neurosurgeon per 100,000 people, Tanzania they have 1 per 1.33 million.

In 2006, an American Neurosurgeon upon finishing his Neurosurgical training traveled to Tanzania where he stumbled on a remote 400 bed hospital, Haydom Lutheran Hospital, Manyara district. At the time there was only one doctor. Most of the care was provided by Medical Officers (3 years education post secondary school) and clinical officers (1 - 2 years training). First he began doing life saving Neurosurgical procedures such as shunts, repair of meningo-myleoceles, drainage of subdural hematomas, etc. But he realized when he left they would be in the same situation, so he found a bright, skillful Medical Officer and he trained him to perform these same life saving procedures. After 6 months it was time for Dr Elegalla to go back to the USA to start his career. When he returned he started a program called Physician Training Partnership (PTP), a not-for-profit organization with the vision to help the Tanzanians develop the care for the neurosurgical patient.

Dr Elegalla has spent half of the last 3 years in Tanzania helping the people served by Haydom Hospital but his idea did not stop there. He made contact with the neurosurgeons in Dar who needed help. How can 3 neurosurgeons provide care for so many people? Thus an idea evolved for a partnership between PTP & Tanzania. In January 2008, I joined the program as the coordinator of nursing & allied health. We met with representatives from the proposed 5 remote (Regional) hospitals, the Neurosurgeons at MOI, and the Ministry of Health to draft a proposal (conceptual framework) for developing capacitance in Neurosurgery. The reality is that this was a proposal to develop capacitance in the Neurosciences, thus including Anesthesia, Neurology, Oncology, Rehabilitation and Nursing.

The neuroscience educational needs vary between institutions in Tanzania. At MOI, the intensive care unit and operating theater where they care for the neurologic patient is only 4 years old. It is quite modern by most standards however they have no invasive monitoring. The nurse for the ICU received one year of training in South Africa and has a good basic education. They have ventilators, pulse oximetry, but no blood gases. In the remote hospitals things are more basic. There are no ventilators, oxygen compressors are shared between several patients and if a patient is intubated an assistant will sit by the bed and bag the patient when assistance is needed. Pulse oximetry may or may not be working.

On my first two visits I have concentrated on teaching the basics of brain injury management. In the remote hospital, that means teaching them how to manage the ABC's (airway, breathing, and circulation) and to perform a Glasgow Coma Score and pupil exam. Airway management included proper suctioning techniques, what the pulse oximeter reading means and what to do if the number is low, and how to bag-ventilate patients properly. Other basic concepts included elevating the head of the bed to treat intracranial pressure as well as improve breathing and decrease the risk of aspiration, and treating fever. In MOI more advanced concepts in the management of increased intracranial pressure such as cerebrospinal fluid drainage and intracranial pressure monitoring was introduced.

Each site requires a different approach but the goal is the same- Independence in the ability to deliver care to the neurologic patient.

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