

The Golden Mortar



News from the Southern Gauteng Branch of the Pharmaceutical Society of South Africa and associated pharmaceutical sectors.

Edition 3 / April 2013



GETTING TO KNOW YOU

Chairman of the Branch, Lynnette Terblanche

As one can imagine, Lynnette's time available for interviews is limited and so the Golden Mortar asked her to answer a few questions about herself so that readers could get to know the person who is currently the Chairman of the Southern Gauteng Branch of the Pharmaceutical Society a little better. Here are the questions that we posed and the responses that we received from Lynnette.

GM Where were you born?
LT ***In Pretoria***

GM Where did you attend school and university?
LT ***I attended Florida Park High School and obtained my Pharmacy and Honours degrees from Potchefstroom University (now known as NWU).***

GM. What did you want to become when you were growing up?
LT ***A Veterinarian.***

GM So what led to a career in pharmacy?
LT ***Even pharmacy as a career for ladies was frowned upon when I was in high school, let alone veterinary science. In my matric year I considered all the options only to find that there was not even a residence for lady students at Onderstepoort! Needless to say I had to look elsewhere and believed that even pharmacy may have possibilities for animal medicine. After joining industry, I did have the opportunity to work in the veterinary medicine manufacturing environment for a number of years.***

GM What was your very first job/position?
LT ***I did my internship at the South African Railway Dispensary opposite Park station, then known as Johannesburg station. It was great because I still had sufficient time to play a lot of tennis. After completing my internship I worked in retail phar-***

macy and then pursued a career in industry.

GM Can you briefly describe a current, typical day at work?

LT ***Most days are not very typical as there are usually new challenges whether it is managing people or interacting with the regulators.***

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GM What do you think has been your greatest achievement career-wise?

LT *Fellowship of the Society in 2012.*

GM What do you think has been your greatest non-career achievement?

LT *The privilege to, together with my husband, have brought up two children to be very level headed young adults who believe that there is a future in South Africa*

GM What do you enjoy most about the job that you do?

LT *Nothing beats the fact that ultimately I may be making a difference in the quality of life of a patient once a new treatment entity is made available on the market in South Africa.*

GM What is the best advice that you have ever received?

LT *The best advice I and anyone for that matter, can receive is embodied in the "Sunscreen Song". You should do yourself a favour and listen to the advice imparted in this "song".*

GM What/who inspires you?

LT *My father inspired me with his rock solid sense of fairness. Today I am inspired by my religious beliefs.*

GM Do you have a pet aversion?

LT *Dishonesty.*

GM What is the one thing that you could not live without?

LT *There are many things that I cannot live without. A fair amount of sunlight is one of these.*

GM What is the most important lesson that life has taught you?

LT *Life is not the way it is supposed to be. It is the way it is. The way we cope with it is what makes the difference.*

GM What station is your car radio tuned to right now?

LT *I spend anything between two and three hours in the traffic every day. I find "talk radio programs" very frustrating. I therefore prefer to listen to classical music.*

GM If you were auditioning for "Idols" what song would you choose to sing/play?

LT *I would prefer to not have to audition for "Idols"*

GM What are you currently reading?

LT *Bad Medicine and Seven Days (Deon Meyer).*

GM Why do you like living in South Africa?

LT *South Africa is dynamic, challenging and has the best climate in the world.*

NEW PHARMACEUTICAL ASSOCIATION



Please be advised that IMSA does not exist anymore.

We are now a new association called Innovative Pharmaceutical Association South Africa (IPASA)

Thanks

Eugenia Lunga

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www.ipasa.org.za

IPASA represents manufacturers of innovative medicines

ComplienZ

for optimal drug usage



VACCINES THE PHARMACIST CAN RECOMMEND

Jacqui Souter BPharm - Amayeza Info Centre



Most pharmacy customers are aware that their infants and young children need to be immunised and campaigns to get preschool children vaccinated have been successful. However, customers may not be aware that there are vaccines available for older children and adults. Vaccines may be recommended for adults based on their age, vaccination history, lifestyle, occupation and travel. In this article we briefly discuss the vaccines that can be recommended routinely for healthy adults

Vaccine	Indication	Recommended for	Dose	Comments
Flu vaccine	Individuals over the age of six months who wish to protect themselves against flu.	Pregnant women. Young children. Adults over 50 years of age Those with underlying medical conditions. Household contacts and caregivers of high risk individuals Breast-feeding mothers.	6 months – 36 months of age: 0.25 ml Over 36 months: 0.5 ml Children from 6 months up to and including 8 years of age, who have not received a flu vaccine before, should be given two doses of vaccine at least 4 weeks apart.	The flu vaccine should be given when it becomes available, usually by the middle of March. It is never too late in the season to be vaccinated.
Tetanus, diphtheria, acellular pertussis and polio vaccine (Tdap/IPV)	For booster vaccination against tetanus, diphtheria, acellular pertussis and polio. There are two licensed vaccines available: Adacel quadra® age range is from 3 years through 64 years of age. Boostrix tetra® age range is from 4 years onwards.	Adolescents: A dose is recommended routinely at 12 years. New parents, close contacts and caregivers of infants and young children.	Tetanus and diphtheria boosters are recommended every 10 years through out adulthood. A single dose of Tdap/IPV is recommended to replace a Td vaccine. Thereafter, a Td vaccine should be given every 10 years.	Internationally, pertussis-containing vaccines are recommended during pregnancy to protect newborn infants from contracting pertussis from their mothers. In South Africa, there are no official recommendations as yet. Advise pregnant women to discuss pertussis vaccination with their doctors.
Measles, mumps and rubella (MMR) vaccine	Active immunisation against measles, mumps and rubella, from 12 months of age.	Non-immune women of child-bearing age in order to protect against congenital rubella syndrome should the disease be contracted during a future pregnancy. Household contacts and caregivers of high risk individuals	Two doses are required with a minimum interval of at least 4 weeks.	Complications of mumps in adults include symptomatic meningitis, testicular inflammation and oophoritis. Women who contract rubella are also at increased risk of arthralgias, arthritis and encephalitis.
Varicella vaccine	Active immunisation against varicella from 12 months of age.	Household contacts and caregivers of high risk individuals such as pregnant women, premature infants and immunocompromised patients.	Two doses are required at least six weeks apart.	Adults with a history of a chickenpox infection are thought to be immune and do not need vaccination. Adults who contract chickenpox have an increased risk of complications such as bacterial infection of skin lesions, pneumonia, central nervous system manifestations, hospitalisation and death.

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<p>Human Papilloma Virus (HPV) vaccine</p>	<p>There are two licensed HPV vaccines: Bivalent (Cervarix®) which is indicated for the prevention of cervical precancers and cancer caused by HPV types 16 and 18 in females from 9 years of age. Quadrivalent (Gardasil®) which is indicated for the prevention of cervical, vaginal and vulvar precancers and cancers as well anogenital warts caused by HPV types 6, 11, 16 and 18 in females aged nine to 26 years and in males aged 9 to 17 years for the prevention of anogenital warts.</p>	<p>HPV vaccines are intended to be administered before the onset of sexual activity and the first exposure to HPV infection as this is when the individual would derive the most benefit from the vaccine. However vaccination of an individual who is already sexually active should still be considered.</p>	<p>Cervarix®: series of three intramuscular vaccines at 0, 1 and 6 months. Gardasil®: a series of three intramuscular vaccines at 0, 2 and 6 months</p>	<p>Internationally, Gardasil® is used up to 26 years of age in men and in women, up to 45 years of age. HPV vaccination does not remove the need for annual Pap smears.</p>
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Conclusion

The need for vaccines does not end in childhood. Adults are in need of booster doses of the vaccines that they received in childhood such as Tdap/IPV. If they have not been previously vaccinated nor had the disease, MMR and the chickenpox vaccine can be given to protect against future infection. HPV vaccines and an annual flu vaccine can also be suggested.

Bibliography available from the Southern Gauteng Branch of the PSSA on request.

South African Pharmacy Council is hosting the first-ever National Pharmacy Conference in South Africa.

The long awaited and much-anticipated National Pharmacy Conference 2013 is just around the corner. The conference will take place at Sun City in the North West Province between 23 and 26 June 2013. Pharmacists from all the sectors of the pharmacy fraternity in the country are finalizing arrangements for the 'trek' to the platinum-rich Bojanala District of the North West Province to participate in the celebration of pharmacy to experience a get-together that could well mark the beginnings of an exciting trend in the pharmacy profession. The conference is earmarked to be held every four to five years.

The objective of this benchmark conference is to mould the pharmacy profession into a force that will unite behind a shared vision to contribute more significantly to a stronger South African healthcare system as we move to Pharmacy 2030.

Everyone involved in the process of converting the molecule into a medicine (pill, capsule, creams, ointment, syr-

up and suspension) right through to the patient is expected to be there. The programme has been put together by a highly competent team and boasts national and international speakers who will deliver presentations on topics of peak concern and discuss current trends meant to influence policy direction in pharmacy and, consequently, in healthcare. Some of the hot programme topics include:

- How Pharmacy contributes to the Health Sector (Minister of Health, Dr Aaron Motsoaledi)
- Training of Pharmacists and Pharmacy support personnel (PTA and PT) in the SA universities (Dr Blade Nzimande – Minister of Higher Education and Training)
- The Importance of Pharmacy in South Africa (Ms Precious Matsoso - DG: Health)
- Strategy to increase capacity of Pharmacy Human Resources – pharmacists and mid-level workers;

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- Re-engineering pharmacy curriculum to embrace biotechnology and nanotechnology;
- Trends in mobile health and e-health;
- Role of the pharmacist in achieving the Millennium Health Outcome Goals;
- Role of the pharmacist in National Health Insurance (UK, Ghana and SA perspective);
- Drug Supply Management - Manufacturing to Patient;
- The legal responsibilities of the Responsible Pharmacist in every sector of pharmacy practice. - SAPC/MCC. **AND MUCH MUCH MORE**

Exhibitors and traders are eager and geared-up to display their products and innovations, and our generous sponsors, without whom it would have been difficult to arrange a conference of this magnitude, are ready to make it happen. You shouldn't need to find another reason to attend - you just have to be there to experience it for yourself.

To make it even more palatable, the National Pioneer

Pharmacy (Professional and Facility) Awards will take place. Individuals who have excelled in the pharmacy profession will be honoured and rewarded at this auspicious event. To tempt you even further, you will be able to enjoy a specially arranged day of golf on one of the spectacular golf courses.

The conference will be a dynamic, information-driven and patient-orientated event which will highlight the critical roles that characterise the pharmacy profession. It will allow all sectors of the profession a unique opportunity to get together to tackle, debate and attempt to resolve issues that are common to all in pharmacy. The role of pharmacy in healthcare cannot be over emphasised. We, as pharmacy personnel, bear testimony to this. Pharmacy is integral in addressing the healthcare needs of the people of South Africa.

This is a last minute call for registrations. More information and details appear on the conference website, www.sapconference.za.org, and Council's office is on standby to offer assistance.



Probably the most significant life-saving medicines ever developed began with the discovery of the first chemical substance to stop the progress of bacterial infections. The breakthrough was sulfanilamide, which was derived from the sulfonamide moiety.

Its application as a bacteriostatic medicine in man was developed by a team of researchers led by Gerhard Domagk in the laboratories of the Bayer Company in Germany in 1932. They named the product "Prontosil Rubrum" as its activity in curbing the growth of bacteria was first discovered in a vat of red dye in their laboratories. This led to the first drug to save the lives of people who had contracted bacterial infections. Before that millions of people, including an estimated 2.5 million wounded soldiers in World War 1, died from the infections of the staphylococcus and streptococcus bacteria. Domagk was awarded the Nobel Prize in 1939 "for the discovery of the antibacterial effects of Prontosil". The Nazis forced him to decline the honour. After the war, in 1947, Domagk was given his gold Nobel medal but not the money. The Nobel Foundation rules require that the money not be paid if the prize is not accepted within one year.

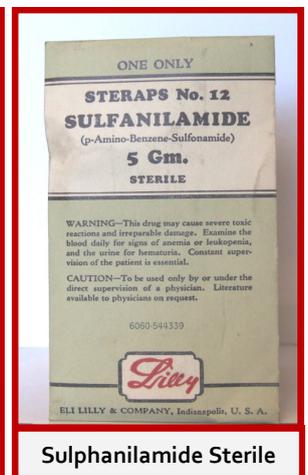
During the following few years thousands of variations of sulfanilamide were developed. Their antibacterial properties inhibited the growth of bacteria but did not elimi-

nate those already present. These medicines had to be used with care as a number of patients developed allergic reactions to the "sulfa" drugs. Their usefulness has been significantly reduced due to the development of resistance by a large range of bacteria.

Photographs below of Prontosil ampoules and sulfanilamide are from the collection in the pharmacy museum.



Prontosil Soluble



Sulphanilamide Sterile

The next edition of the Golden Mortar will continue the saga of anti-infectives





SAAHIP SOUTHERN GAUTENG BRANCH REPORT April 2013

Liezl Fourie, Branch Chairman

**The 56th AGM and 27th Annual
Conference, 14th to 17th March
2013**

Champagne Sports Resort, Drakensberg

Moving forward from last year's conference which challenged pharmacists to "take pharmacy beyond imagination," this year's theme, "Pharmacy, Serving with Passion," aimed to inspire hospital and institutional pharmacists to take pharmacy to the next level – focussing especially on patient care and the overall improvement of pharmaceutical services.

The conference was again hosted by the Northern Gauteng branch – well prepared and well organised as expected. This year's academic programme showed definite evidence of practising pharmacists who implemented quality improvement projects for the benefit of the patient, and also the provision of pharmaceutical services, among other initiatives.

Southern Gauteng's delegation

Out of the 19 delegates from Southern Gauteng Branch, 3 were presenters; Sonya Kolman (Netcare Linksfield Hospital) presented on the effect that modern technology can have on performing clinical ward functions. Capturing data directly on an iPad, at the patient's bedside, resulted in less time spent on administration work. The other benefit found was that all clinical and reference material needed during a ward round, could be stored on the device, thus not having to carry stacks of text books around. She discussed some of the useful applications available for downloading on an iPhone or iPad.

To reduce waiting times at the outpatient's department at Helen Joseph hospital, Shereen Ramroop discussed how they managed to reduce waiting times for patients in the "critical" queue from 88 minutes to 12 minutes, while in "normal" queues, waiting time was reduced from 94 minutes to 61 minutes. With clever staffing models and the introduction of simple changes in the dispensing process, not only was overtime decreased by 73,5%, but also it resulted in more time for the pharmacists to perform functions related to GPP.

On a lighter note, an amusing "Pearl" presentation titled "50 Shades of Grey" was presented (and performed), by



Liezl.

It has recently become evident that the previously shy and reserved SG delegation have transformed into a united force to keep up with! All 19 delegates actively participated in the social evening functions with theme-related dress, and even though the well rehearsed adaptation of the song

"Getting to know you" from the musical "The king and I" was shockingly off-beat and off-tone, it brought tears of joy and laughter to the crowds at the Aspen Gala Dinner Dance on the final evening; in retrospect, the SG performers on the stage laughed the loudest and were most probably the people enjoying it the most.....!

Academic Programme

With 33 podium and poster presentations, all areas of hospital pharmacy were well represented and covered. Pharmacists are now more than ever sharing their trials and tribulations with others – and with topics such as "Antibiotic stewardship", "Role of a ward pharmacist", "Early warning indicators for HIV drug Resistance", "Radiopharmacy", etc., the abundance of knowledge gathered by pharmacists in their everyday place of work, is truly inspiring.

Speakers

The proceedings were opened by Andy Gray who gave feedback from the WHO on the responsible use of medicine, titled "Five Hundred Billion Reasons to do Better – The Centennial Promise". Emerging markets in the use of medicines (pharmerging markets, which include countries like South Africa, Brazil, India, etc.) is estimated to show > \$1bn spending growth over 2012 – 2016. Thus saving is crucial; avoidable costs include patient non-adherence (contributes to 66% of unnecessary spending), untimely medicine use (16%), antibiotic misuse (11%), suboptimal generic use and mismanaged polypharmacy (10%), and medication errors less than 10%. A quick fix at a low cost is needed to overcome this massive "waste" of funds, and some of the plans discussed were, for instance, supporting pharmacists in medication management, investing in medical audits and implementing mandatory reporting of antibiotic use by the providers (the hospital, doctor/pharmacy) that could be assisted by funders to collect data.

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The national Department of Health was represented by Dr Anban Pillay (DDG for Regulation and Compliance at the NDoH) who discussed the progress of NHI implementation since 2012. The main focus was on hospital reform, and included in his presentation was the establishment of an institute for hospital management, development of an alternative reimbursement tool for the funding of central hospitals, setting up an office of standards and compliance to assist with the assessment, and a strategy for the quality improvement of facilities.

Other speakers included Dr Johann Kruger, President of the PSSA; Prof Rob Summers of MEDUNSA Pharmacy faculty; Dr Gert Bosch, a psychiatrist, and Mr Bada Phasi President of the SA Pharmacy Council. Something completely different, but lots of fun (physically and mentally) was a session on "Laughter Levity", presented by Nina du Toit Saunders and Nomathembu Dube.

Portfolio reports

Continuing Professional Development (Southern Gauteng)

At the last conference and AGM the need for hospital pharmacy related CPD topics was raised, and members were encouraged to participate with regard to choosing topics, and these sessions were made possible with the assistance of generous sponsorships. Some of the topics presented at branches during 2012 were:

- ⇒ Diabetic Treatment
- ⇒ The Risk of Suicide in Drugs used to treat mental disorders
- ⇒ DVT prevention
- ⇒ NHI – The Role of the Pharmacist
- ⇒ Depression
- ⇒ Rabies

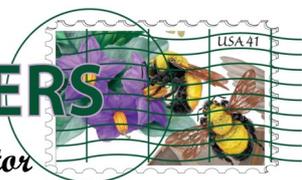
Some branches have already planned topics such as Hepatitis, Malaria, Paediatric Nutrition and ARV therapy, for 2013.

The SAAHIP website was also used as a medium to share information, especially on the topic of Antibiotic Stewardship and ward pharmacy; articles posted include for example Clinical Guidelines on the use of intravenously administered proton pump inhibitors; Malaria Prevention; The spread of carbapenem-resistant Enterobacteriaceae in South Africa; etc.

If you fall off the hospital knowledge map – SAAHIP will fill the gap!

The 57th AGM and 28th Annual Conference in 2014 will be hosted by the two Kwa-Zulu Natal branches.

LETTERS



To the Editor

Why not electronic in future and stop the hard copy?
Ian Smith
(By e-mail)

Dear Editorial Board

Some good has come out of the Post Office strike – (or is it now a work stoppage? – whatever the politically correct term is) – I would like the choice of NOT receiving printed copy of the GM. I love the ad for the Post Office on 702 this morning while a strike is on – "We deliver whatever it takes" or something similar. Maybe they mean "We take whatever we like". I digress. As a keen environmentalist and re-cycler it would be wonderful not to have to anguish over the consigning of 2 copies of the Golden Mortar into the paper waste for re-cycling – yes, there are 2 pharmacists in the home.

ELECTRONIC GOLDEN MORTAR

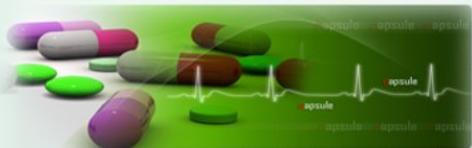
Why not give the subscriber the choice of receiving electronic or hard copy? Savings definitely in both paper and postage – AlphaPharm is advertising on the envelope – good for them. I had not even noticed but it is really a waste of money as who cares whose name is on the envelope. If you had done a blind quiz as to who the last sponsor was I would not have been able to tell you – sorry UPD.

I have taken the liberty of scanning a few pages from my late father – in – law's prescription book as well as his "little black book" and some other correspondence, when letter writing was still done with a pen and ink, and typing probably done on a Royal typewriter – just as Ray writes about. The prescription book still has the smell of the old pharmacy when dispensing was still an art!

Kind regards
Stuart Hamilton
(By e-mail)

I enjoyed the snippet about "leading pharmacies" which reminded me of my regular irritation regarding the reference to Pharmacists as "qualified pharmacists". Can somebody please define an unqualified.
David Kahn (By email)





PHARMACY TECHNICIANS TRAINING IN BOTSWANA

Tour of the National Pharmacy Museum

BACKGROUND INFORMATION ON INSTITUTE OF HEALTH SCIENCES GABORONE (IHSG):

General information

IHSG is a tertiary institution for the training of health personnel under the Ministry of Health. There are 8 training programmes namely Pharmacy Technology (Higher National Diploma), Dental Therapy, General Nursing, Health Education and Medical Laboratory Technology. Post-basic diploma programmes include Family Nurse Practice, Midwifery and Nurse Anaesthesia.

Pharmacy Technology (PT) Programme-Overview:

The PT programme is a three-year higher national diploma programme geared at producing a cadre with appropriate skills to be able to advance the relevant principles of the National Health policy.

The vision of the department is to train and develop appropriately skilled, knowledgeable, technologically adaptable, and customer oriented pharmacy technicians in adequate numbers to meet the National Health manpower requirements for pharmaceutical services. It is also the vision of the programme to continue concurrently training pharmacy technicians as well as allowing progression to training pharmacists at degree level in the very near future.

Programme Objectives:

At the conclusion of this programme, learners are expected to achieve objectives such as, but not limited to, the following:

- Demonstrate responsibility and accountability in the managing of pharmaceutical services in the various health care facilities.
- Provide quality pharmaceutical services in support of the primary health care services in Botswana.
- Participate in the provision of pharmaceutical knowledge to other health professionals and the community.
- Apply the principles and methods of production in small to large scale manufacturing in

accordance with good manufacturing practice.

Each year the final year PT students undergo a two-week industrial attachment tour as partial fulfilment of their Higher National diploma; of which in recent years the visit to the PSSA Pharmaceutical museum has become an integral component.

PHARMACY YEAR III PSSA PHARMACY MUSEUM TOUR - 8TH MARCH 2013:

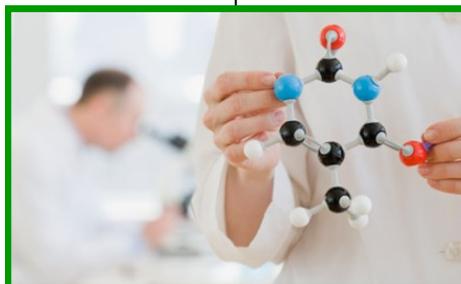
Introduction

Following warm welcoming remarks from management, a very insightful DVD titled 'Molecules to Medicines,' was shown to the students to emphasize the costs, effort and time involved in drug discovery. Concepts of High Throughput Technology, computational chemistry, medicinal chemistry, crystallography, pharmacology, toxicology, galenics, pharmacogenomics and clinical trials were reiterated.

Pharmacy Museum:

Students were very fortunate to be led by Mr. Pogir himself, as he gave an in-depth insight into how the profession of pharmacy has evolved over the years. Some of the areas covered were as follows:

- Documentation
These included pharmacopoeias dating as far back as the 1690's and early 1700's. These had various origins that included European sources. Prescription books from the gold rush era were also used to demonstrate the practice of pharmacy.
- Equipment
Various pieces of equipment observed included cachets filling machines, pill-making machines, mortar and pestles, powder folders, suppository and pessary moulds, cork presses, ampoules sealers, ointment tube sealers and many others. The operation of the various pieces was explained in detail to the students.



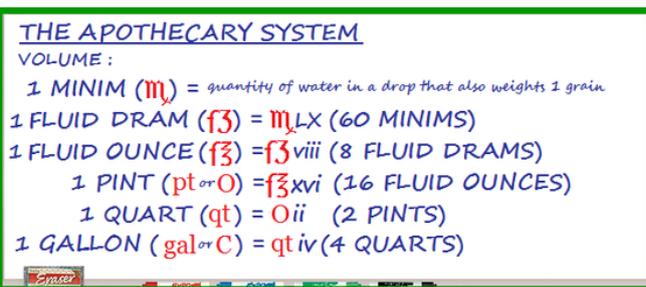
- Units of measure
An explanation of the apothecary units used at the time (grains etc.) was given to the students as well as the measures that were used e.g. the Imperial Bushel Measure.
- Medicines and Chemicals
Samples of historical medicines were shown and their uses described e.g. red dye sulphanilamide, penicillin and the Dutch medicines.
- Insignia
The various communication artefacts that would be hung in an olden day pharmacy to warn members of the public for example about disease outbreaks would include such items such as yawners and hobwebs.

In all this, the curator systematically took the students from the time when the pharmacist had to be knowledgeable of ingredients of medicines as prescriptions were customised and compounding was

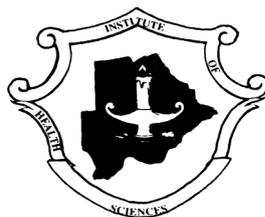
the main focus, and aesthetics and durability of equipment and containers was paramount; through to the modern times of dosage form mass production.

The tour was a unique experience and was highly beneficial to both the lecturers and students. This led to an increased appreciation of the pharmacy profession.

Compiled By: Owen Mushisha and Deepa Bhatia in consultation with the Pharmacy students.



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INSTITUTE OF HEALTH SCIENCES
P.O. BOX 985
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To: Ray Pogir
Curator
Pharmacy Museum
Pharmaceutical Society of South Africa
Gauteng branch
South Africa

25th March 2013

RE: PHARMACY YEAR III INDUSTRIAL ATTACHMENT – PHARMACY MUSEUM

On behalf of the pharmacy department, we would like to thank the Pharmacy Society of South Africa for providing the Institute of Health Sciences in Gaborone (IHS), the opportunity to tour the pharmacy museum and impart valuable information to the year III pharmacy students.

The programme set-up for the museum tour was a very interesting, well organized and educational one. For this we would like to thank the management, discussion leaders and staff that made the attachment a resounding success.

Please find attached a report of the pharmacy museum tour on the 8th March 2013.

Thank you and Regards

Owen. M and Deepa. B
(Senior Pharmacy lecturers)



Are vitamin B₃, nicotinic acid and nicotinamide the same?

Amayeza Info Centre



The terms nicotinic acid, nicotinamide, niacin and niacinamide are often used interchangeably. It may be useful to briefly revise the differences between these vitamin-like substances.

Nicotinic acid does not equal nicotinamide

Vitamin B complex comprises of a large number of compounds that differ in chemical structure and biological action. They were grouped in a single class because they were originally isolated from the same sources, such as liver and yeast. There are traditionally 11 members of vitamin B complex, namely thiamine, riboflavin, **nicotinic acid**, pyridoxine, pantothenic acid, biotin, folic acid, cyanocobalamin, choline, inositol and para-aminobenzoic acid. The latter three, however, are not essential vitamins.

Nicotinic acid is also referred to as vitamin B₃ or niacin. Nicotinic acid occurring in its amide form is called nicotinamide. The term niacin was introduced to avoid confusion between the vitamin and nicotine. It follows then that a synonym for nicotinamide would be niacinamide.

Table 1: Vitamin B₃ Synonyms

Vitamin B ₃	Vitamin B ₃ amide form
Nicotinic acid	Nicotinamide
Niacin	Niacinamide

Nicotinic acid and nicotinamide are readily absorbed from the gastrointestinal tract and distributed to the tissues. Intracellular nicotinamide and nicotinic acid are rapidly converted to either nicotinamide adenine dinucleotide (NAD) or nicotinamide adenine dinucleotide phosphate (NADP).

NAD and NADP are the physiologically active forms of nicotinic acid and nicotinamide. NAD and NADP are co-enzymes involved in the metabolism of a variety of proteins and are stored in tissues with high metabolic activities such as muscle and liver. Nicotinic acid and nicotinamide are identical in their function as vitamins. Both nicotinic acid and nicotinamide can be used in the management of nicotinic acid deficiency. However, they differ in their uses as pharmacological agents.

Nicotinic acid has multiple effects on lipid metabolism, the mechanism of which is not fully understood. Nicotinic acid:

- Reduces serum levels of very low-density lipoprotein (VLDL) and low-density lipoprotein (LDL).
- Reduces triglyceride synthesis, while at the same time increasing high-density lipoprotein (HDL) levels.

Nicotinamide does not have these beneficial effects on the plasma lipid profile.

The dose of nicotinic acid required to improve lipid levels is much higher (1000 to 2000 mg per day) than that needed for the treatment of deficiencies or supplementation. The recommendation daily (dietary) allowance of nicotinic acid in men is 16 mg/day and in non-pregnant, non-lactating women is 14 mg/day.

Nicotinic acid produces peripheral vasodilation and flushing, when used in high doses. However, the use of aspirin or other prostaglandin inhibitors may lessen this side effect.

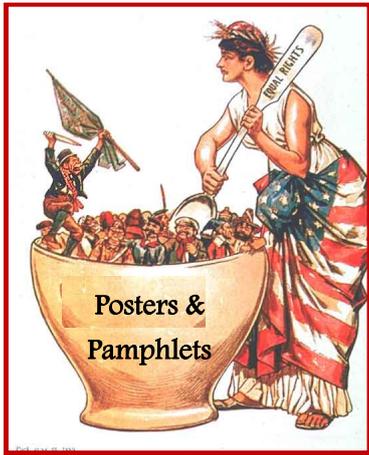
Peripheral vasodilation and flushing are not generally seen with nicotinamide.

Note: A nicotinic acid product for reduction of cholesterol levels has recently been registered in South Africa.

Key points:

- Nicotinamide (niacinamide) is the amide form of nicotinic acid (niacin).
- NAD and NADP are the physiologically active forms of nicotinic acid and nicotinamide.
- When acting as a vitamin, nicotinic acid and nicotinamide are identical in their function.
- Nicotinic acid in higher doses has the ability to improve lipid levels.
- Nicotinamide may be used as a source of nicotinic acid for its vitamin functions, but not for its beneficial lipid lowering effects.





Stirring the Pot

Posters and pamphlets.....

.....more specifically, those issued and distributed to pharmacies earlier this year by the SA Pharmacy Council (SAPC) regarding

"Patient rights in a pharmacy" and "Patient responsibility in a pharmacy".

Many concerns and questions arise; most importantly, how many pharmacies have complied with the SAPC's "mandatory" instructions? By visiting pharmacies and making appropriate enquiries, I suggest a very low compliance rate indeed.

Was the content of the posters researched properly amongst focus groups to determine whether the desired understanding of the messages would be adequately conveyed? Were professionals used to create these posters or was it simply an in-house attempt?

What research, if any, was done to prompt the perceived need for the distribution of such posters to be displayed in pharmacies instead using other available options, for example magazines, that have far more potential of reaching the target patient groupings? To the best of my knowledge, other health professions are not required to display similar posters regarding their professions, why pharmacists? It is almost as though we are admitting to making errors, providing inadequate professional advice and providing questionable levels of service.

To which prime audience are these posters directed? Is it those waiting to have their prescriptions dispensed? Was it the intention of the SAPC to measure the response of the public (and perhaps

pharmacists) to these posters? To be fair, the small print at the bottom of the posters does invite patients to "Tell us about a positive or negative experience in your pharmacy." - i.e. compliments and complaints in terms of service delivery - to an email address provided. However, knowing human nature as I do, I suspect that not many patients will take the time and effort to respond in a positive fashion.

I know pharmacists have taken strong exception to the wording of parts of one or other of the posters

and as an example, is it appropriate that patients be told that they "...have the RESPONSIBILITY to return any expired medicine for destruction" - without clarifying the cost of such disposal. Is the pharmacy just expected to foot the bill again? Has such an expense been considered

when determining our so-called professional fee?

The big questions which may be posed regarding both the "rights" and the "responsibility" posters are;

Will the messages reach the relevant audiences and be interpreted as intended, or has this been an exercise in futility?

On the other hand, have any positives to have arisen from displaying these posters or from the distribution of the A5 pamphlets?



What is YOUR opinion? Let us know, anonymously if you wish, at "pssa@pssasg.co.za"





IMMUNIZATION: WITH SPECIAL REFERENCE TO INFLUENZA AND SOME CHILDHOOD ISSUES

A short report on the CPD presentation by Prof B Schoub, National Institute of Communicable Disease (NICD)

Most queries received by the NICD concerning vaccinations are related to influenza vaccine. There are many myths relating to influenza vaccines, none of which have any scientific basis, which confuse the public on the value of influenza vaccinations. These include:

- The vaccination doesn't work anyway.
- I don't get flu so I don't need it.
- Flu is a trivial disease.
- Vitamin C / immune boosters / healthy diet / healthy living are more effective.
- The vaccine gives bad side effects – I'd rather have the flu.
- The vaccine gives you flu.
- Anti – vaccination slander.

South Africa does not do well in flu vaccine utilization, perhaps some of the reasons are a high level of misunderstanding and a lack of appreciation of the value of the flu vaccine. There is also the trivialization of the seriousness of influenza infections.

Seasonal Influenza is the type of influenza that we are primarily concerned with. It occurs in temperate climates and is usually confined to the winter season.

The virus which causes influenza may mutate from one season to the next. Samples are collected internationally and the final vaccine of the correct attenuated strain is approved by the WHO before it is distributed.

The priority groups to receive flu vaccinations in the new guidelines for 2014 are expected to be:

- Pregnancy
- Children from 6 to 59 months
- The elderly
- Individuals with specific chronic medical conditions
- Health workers

Prof Schoub also addressed the sequential strategies for polio vaccination and rubella vaccination strategies. He also made an appeal for wise usage of antibiotics. He suggested that overuse and misuse of antibiotics in humans and livestock are responsible for the emergence of resistant bacteria. The session was well appreciated and well attended.

Thanks are due to Sanofi Aventis for sponsorship of this CPD session



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We welcome controversial contributions and as space permits, these will be published, abridged if necessary

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