



**EPI-RELATED CURRICULUM REVIEW FOR NURSING
INSTITUTIONS IN SOUTH AFRICA**

WORKSHOP REPORT

**EMERALD RESORT AND HOTEL
VANDERBIJLPARK, THE VAAL
1-4 APRIL 2007**

EXECUTIVE SUMMARY

A workshop to review and update the EPI-related curriculum for nursing institutions in South Africa was held at the Emerald Resort and Hotel in Vanderbijl Park, Gauteng Province South Africa from 1 to 4 April 2007. The objectives of the workshop were as follows:

- To revise the technical content of the immunisation curriculum according to the WHO Prototype curriculum
- To update the technical knowledge and skills of faculty, professors, lecturers and teachers responsible for the teaching of the EPI topics in line with the WHO Prototype
- To use the WHO prototype as a guideline to ensure the following:
 - ✓ relevant learning objectives are formulated,
 - ✓ active methods and techniques are used for teaching/learning
 - ✓ appropriate time is allocated to the course topics,
 - ✓ a sound balance exists between theoretical and practical sessions,
 - ✓ appropriate training materials in sufficient quantities are available in educational institutions,
 - ✓ appropriate supplies and demonstration equipment are available in educational institutions,
 - ✓ adequate learning and programme evaluation is conducted

The workshop was attended by 36 participants from nursing institutions and a further 14 from the World Health Organization (WHO), Network of Education and Support on Immunisation (NESI), National Department of Health (NDOH), Industry partners such as Becton Dickinson and Sanofi Pasteur, making a total of 50 attendees. The opening ceremony was hosted by the University of Limpopo with Prof R Golele, The Campus Principal for the University of Limpopo, Medunsa Campus and Dr E Mutabaruka from the WHO, making opening remarks.

The methods of the workshop were pedagogical; with didactic lectures in information sessions, presentations and demonstrations and group discussions. Group discussions were on identifying gaps on the content curriculum for EPI related teaching and coming up with a plan of action for filling the identified gaps and implementing the recommendations.

The **recommendations** from the workshop were directed to the Training institutions, to the National Department of Health and the workshop participants (nursing educators).

- ✓ **To the National Department of Health (NDOH):** That there be an improvement in infrastructure and operations of the clinics to facilitate placement of students for practica. The National Department of Health should facilitate information dissemination

and be involved in the efforts to integrate services related to child survival. In addition the department should accelerate the introduction of new vaccines and technologies like auto-disable syringes (ADS).

- ✓ **To the learning institutions:** That they should align their curricula with global trends and form networks to relate to each other and update their technical knowledge on immunization.
- ✓ **To the workshop participants:** It was agreed that participants should be conduits in information dissemination and start as soon as possible to teach updated content on immunization.
- ✓ **To workshop organizers:** More time to be allocated for information sessions

The proceedings and the organization of the workshop were rated highly by the participants with the satisfaction indices for most of the topics covered being above 70%.

BACKGROUND

Vaccination is a cost effective public health measure for control and elimination of infectious diseases. It is with this premise that teaching on immunisation needs to be comprehensive and up to date in medical and nursing institutions, ultimately to improve service delivery and research outcomes. Against this background and in line with the 2006 Douala Plan of action and recommendations, the University of Limpopo (Medunsa Campus) in collaboration with the University of Antwerpen in Belgium and World Health Organisation (WHO), organized a 3 day workshop on EPI (Expanded Program on Immunisation) curriculum review and development for nursing educators. The workshop was held in Gauteng, at Vanderbijl Park in Emerald Resort and Hotel from 1-4 April 2007.

ATTENDANCE

The target audience for the workshop was nursing educators and these formed the majority of the attendees. Most of the invited colleges had a nursing educator involved in teaching primary health care. Unsurprisingly all the invited participants were female except a representative from industry. . Amongst these were representatives from the department of health, at a district level to whom some of the issues of placement of students were addressed. In addition there was a representative from the South African nursing council so as to facilitate any curriculum changes. The workshop was attended by a total of 50 participants (see annexure 2) from

- ◆ WHO (AFRO REGION)
- ◆ South African National Department of Health
- ◆ South African Universities: University of Limpopo, University of Witwatersrand, University of Johannesburg and University of Cape Town.
- ◆ University of Antwerp, Belgium / NESI
- ◆ South African Nursing Council
- ◆ South African District EPI teams
- ◆ Nursing colleges from Gauteng, Mpumalanga, Limpopo and North West Provinces of South Africa

AIMS

To review and update the EPI related curriculum for basic pre-service and in some cases (in-service) education programme for nurses, using the WHO Prototype Curriculum as a guide.

SPECIFIC OBJECTIVES

- Revising the technical content of the immunisation course based upon discrepancies between the course and the WHO Prototype curriculum
- Updating of the technical knowledge and skills of faculty/teachers responsible for the teaching of the EPI topics in line with the WHO Prototype;
- Using the WHO Prototype as a guideline to ensure that:
 - relevant learning objectives are formulated,
 - active methods and techniques are used for teaching/learning
 - appropriate time is allocated to the course topics,
 - a sound balance exists between theoretical and practical sessions,
 - appropriate training materials in sufficient quantities are available in educational institutions,
 - appropriate supplies and demonstration equipment are available in educational institutions,
 - Adequate learning and programme evaluation is conducted.

EXPECTED OUTCOMES

- Updated technical knowledge on immunisation
- An evaluation and adaptation of the WHO prototype curriculum on immunisation for nursing schools
- Updating EPI related curricula in nursing colleges according to local situational analysis
- Strategies on updating the EPI curriculum
- Evidence based practice on teaching methods.

WORKSHOP METHODS

The workshop methods were didactic lectures, presentations and group participation with feedback.

WORKSHOP PROCEEDINGS

Day 1

The workshop started with an opening ceremony on the eve of the 1st of April, with a video from the Cape Town Call to Action on Immunisation meeting of April 2002, with prominent political figures like Dr Nelson Mandela, Mr. Kofi Anan featuring. There was also an opening speech from the Dean of Medicine at the University of Limpopo, Prof Golele.

Day 2

The background of the emphasis on the curriculum content on immunisation was conveyed to participants as stemming from the Training Needs Assessment that was conducted in several countries in Africa and also from the Doula plan of action, consensus developed in March 2006. The thrust of Day 2 was to give a global overview of immunisation strategies covering the global immunisation vision and strategy (GIVS), the AFRO regional strategy. The emphasis was to demonstrate how important South Africa is as a global player on the issues of vaccines and immunisation, information that could also be relayed to students when teaching immunisation. Other presentations to convey technical information were on Vaccination Coverage in African countries, EPI strategies, EPI systems, Vaccine-Preventable Diseases, and Vaccinology and EPI. The background, activities and future plans for South African Vaccines and Immunisation Centre (SAVIC) as a centre of excellence at the University of Limpopo was also presented. In addition a presentation from the National Department of Health on the social mobilisation and campaigns that were currently going on was done. This briefing on some technical information and an overview of where the nursing educator is was appreciated and laid good ground for the work that was to be covered in the following 3 days.

The group was divided into 3 heterogeneous groups and looked at the content issues using the WHO prototype. They went through the content to identify gaps and any major differences in the WHO prototype and their institutional curricula. The method for identifying gaps was the **Provus Model**. Report back from the groups was done on day 3.

Day 3

Information sessions for this day included a presentation from the National Department of Health, with an overview of the South African EPI, challenges and recent developments. With the achievements included the following

- Elimination of neonatal tetanus in 2002.
- In October 2006 SA was declared to have interrupted wild poliovirus transmission by the ARCC
- Measles Control – Significant decline in cases
- Acute Flaccid Paralysis Surveillance – Certification Standard reached & maintained since 2003
- High national routine vaccination coverage
- Ongoing efforts to increase routine through RED Strategy & integrate with other Child Survival interventions : IMCI,CCMTS and Nutrition

The challenges were mainly low vaccination coverage at district levels, lack of meaningful involvement of academic institutions and clinicians, sustaining the achievements made so far and the low vaccination coverage and outbreaks in neighboring countries.

Plans for the future included the introduction of Td at 7 years & at 12 yrs, introducing new vaccines like pneumococcal and rotavirus vaccine, inactivated polio vaccine, and combination vaccines, pentavalent and later hexavalent vaccines.

Other information sessions covered topics like cold chain management, injection safety with demonstration of the use of auto disable syringes from Becton Dickinson. The groups then presented the work from day two.

During this section it was noticed that the main challenge for most of the nursing tutors was lack of integration in the teaching and the need to emphasize the global policies while teaching like approaching immunisation teaching from a global perspective in terms of MDGs, GIVS and AFRO regional strategies. In addition immunisation issues taking place in other countries needed to be taught. Most of the tutors highlighted the need to have updated information from the National Department of Health in order to feel in the gaps. This challenge came from all the groups.

Other important findings were lack of teaching on integrated disease surveillance, vaccine development and research, calculation of immunisation coverage and drop out rates, data management and analysis, immunisation campaigns, estimating vaccine needs. Management functions including planning immunisation sessions and financial management were not taught at basic pre-service level but were covered under post basic nursing curricula.

The group work from day 3 was on proposed strategies and the plan of action from the meeting. Groups were to come up with practical action plans.

An example of a plan of action which was more practical and reached a consensus was the following:

Activity	Responsible	Time line
Report back to the institution/ relevant stake holders	All delegates	Within 1 month
Training needs assessment	Delegates and training institutions	1year
Networking with relevant institutions and stakeholders	Delegates Province and NDOH	2-3 years
Dissemination of information	SAVIC Province and Department of Health	2-3 years
Consultation with relevant stakeholders	Delegates Province and NDOH	2 years
Revision of teaching and learning materials	Training institutions	1year
Identify and include Learning content for short courses , in-service and post basic training	Training Institutions ,PDOH,NDOH and District	3years
Collaboration between services, Academic Training institutions involving students in a research	Training institutions, services and students	3-5years
Integration of EPI with MCW content and other modules	Training institutions	1year
Emphasises on WHO, International and National strategies eg RED,GIVS and MDG	Training institutions and NDOH	Now
Integrate disease surveillance in the curriculum	Training institutions and NDOH	18mths
Follow processes involved in curriculum update/changes SANC and Faculty boards	SANC, Curriculum committees, faculty boards	2 years

Day 4

The information sessions started with new vaccines and with stimulating discussions on the HIV vaccine progress, the rotavirus vaccine, The HPV vaccine and the pneumococcal vaccine. This session also included a presentation on monitoring and evaluation of EPI programs.

RECOMMENDATIONS

To the National Department of Health

- To distribute new and updated information on EPI, to training institutions in line with global trends
- Inclusion of training institutions Provincial and District EPI meetings, training and other activities to access new information
- To accelerate the process of implementing the use of ADS syringes in the country
- To conduct research on the implementation of new strategies to evaluate the effectiveness and sustainability
- Accelerate introduction of rotavirus and pneumococcal vaccines in the national schedule
- Through advocacy by national department provinces should provide sufficient number of nurse educators/preceptors in line with the SANC recommendations of learner mentor ratio
- Improve current clinic structures to enable to accommodate more learners for practica
- To accelerate the revitalization PHC, support integration of services by all sectors (supermarket approach) and advocate for the extension of operational hours of clinics.
- Provide sufficient financial resources to pre-service institutions for capacity building activities

To the training institutions

- Medical and nursing schools to align their curricula with global trends
- To utilise provincial surveillance officers in giving updated information on surveillance
- To establish linkages with district EPI managers for monitoring and evaluation of the program
- Establish network mechanisms in committees involved in curriculum review and updating
- Utilise collaboration meetings between training institutions and clinical placement committee to access new developments

To workshop participants

- To share updated curriculum with other colleagues
- To utilise updated information available on website e.g.: WHO, UNICEF, NDOH, SAVIC, NESI etc

To NDOH, training institutions and partners

- To support plan of action on revision/adaptation of EPI curriculum in training institutions by providing technical and financial support
- To conduct research to develop and produce new vaccines in collaboration with National Regulatory Council and Institutions

To the workshop organizers

- To monitor the outcome on updated curriculum (yearly) through similar workshops to get feedback from schools
- To orientate participants on evaluation format during the next workshop
- To allow more time for future workshops in order to have detailed inputs on Vaccine-Preventable Diseases

WORKSHOP EVALUATION

Overall analysis for day 1 and day 2 yielded the satisfaction indices (%) for information sessions

Topic	Presentation	participation
GIVS strategy and the regional strategic plan	80	79
Immunisation systems and strategy	78	74
Overview of SAVIC background and activities	84	76
Vaccine preventable diseases	74	70
Vaccinology and EPI	81	77
EPI related curriculum	77	76
EPI schedule and recent developments	73	67
Logistics and cold chain management	80	73
Immunisation and injection safety	81	74

WORKSHOP FUNDING

Contributions for the workshop were obtained from the OIP (**Own Initiatives Project**) which is an academic-public partnership between the National Department of Health (SA) , University of Antwerp in Belgium and the University of Limpopo ; from Becton Dickinson who funded the opening ceremony, and from Sanofi Pasteur who covered travel expenses for participants from Cape Town.

WAY FORWARD

All institutions are expected to debrief their respective supervisors and heads of departments and share the materials with the same. Follow up meetings are to be done by the University of Limpopo with the South African Nursing Council, other Universities and other provinces. Training on immunization and vaccinology for the health workers and nursing educators is also being pursued. In addition an integrated approach to teaching immunization will be adopted along the global trends of designing and implementing an integrated package on child survival.

PROGRAM OUTLINE
IMMUNISATION CURRICULUM REVIEW AND UPDATE WORKSHOP
 VENUE: EMERALD RESORT, THE VAAL **1-4 APRIL 2007**

DATE	STAR T	FINISH	PROGRAM TITLE	SPEAKER / INSTRUCTOR	DESIGNATION OF SPEAKER/ INSTRUCTOR
1 APRIL 2007	1700	1800	Registration		
	1900	2100	Welcome remarks and braai	NDOH, UNIVERSITY OF LIMPOPO PROF R GOLELE (Braai Sponsored by BD)	UNIVERSITY OF LIMPOPO
2 APRIL 2007	0730	0800	Late registration	MS S NAUDE/MS M MADUMO /DR S DUBE	UNIVERSITY OF LIMPOPO
	0815	0830	Introduction to the course	Dr S DUBE/ DR E MUTABARUKA	UNIVERSITY OF LIMPOPO
	0830	0845	Introductory remarks from WHO	DR E MUTABARUKA	WHO
	0845	0915	Immunization coverage in Africa: An overview	DR E MUTABARUKA	WHO
	0915	0945	Outline of the GIVS strategy	Ms C Dochez	NESI
	0945	1000	Questions		
	1000	1030	TEA		
	1030	1100	Immunization systems	Dr MDA	UNIVERSITY OF LIMPOPO
	1100	1130	Immunization strategies	Dr CHAUKE	UNIVERSITY OF LIMPOPO
	1130	1200	Vaccine preventable diseases	Prof AA Hoosen	UNIVERSITY OF LIMPOPO
	1200	1230	Vaccinology and EPI	Dr S Dube	UNIVERSITY OF LIMPOPO
	1230	1330	LUNCH		
	1330	1400	SAVIC	PROF J MPHABLELE	UNIVERSITY OF LIMPOPO
	1400	1430	EPI related curriculum: What do we mean? Experiences from the University of Limpopo	Prof AA Hoosen	UNIVERSITY OF LIMPOPO
	1430	1700	BREAKAWAY SESSION 1: Curriculum content issues (Includes tea break)		
1700	1730	Evaluation and closure for day 1	Dr E Mutabaruka and Dr S Dube	UNIVERSITY OF LIMPOPO/WHO	

3 APRIL 2007	800	0830	Report on evaluation	Dr B CHAUKE	UNIVERSITY OF LIMPOPO
	0830	0900	The SA EPI schedule and recent developments	DR N NGCOBO	NDOH
	0900	0930	Logistics for immunization programs	LINDSAY BOTHAM	NDOH
	0930	1000	Report Back		
	1000	1030	TEA BREAK		
	1030	1100	Immunization Safety:	Ms B SELALEDI	UNIVERSITY OF LIMPOPO
	1100	1130	Injection safety Auto disable syringes versus Conventional syringes	Mr M RADEBE (presentation and demonstration)	BECTON DICKINSON (BD)
	1130	1145	Questions		
	1145	1500	BREAK AWAY SESSION : CONTACT TIME ISSUES INCLUDES LUNCH	ALL FACILITATORS	
	1500	1530	TEA BREAK		
	1530	1600	REPORT BACK SESSION 2		
	1600	1700	BREAKAWAY SESSION 3: RECOMMENDATIONS AND WAY FORWARD	ALL FACILITATORS	UNICEF/NDOH
1700	1730	Evaluation and closure of Day 2	Dr S DUBE	UNIVERSITY OF LIMPOPO	
4 APRIL 2007	800	1000	New vaccines and vaccines in development Rotavirus vaccine Pneumococcal vaccine HPV vaccine HIV vaccine	Ms A GEYER DR S MDA Dr C DOCHEZ DR Z MAKATINI	UNIVERSITY OF LIMPOPO NESI
	1000	1030	TEA BREAK		
	1030	1130	Monitoring and evaluation of EPI programs	Dr B CHAUKE/ DR S MDA	UNIVERSITY OF LIMPOPO
	1230	1330	LUNCH		
	1330	1430	Recommendations and Way forward	Dr E MUTABARUKA/PROF AA HOOSEN/DR S DUBE	UNIVERSITY OF LIMPOPO
	1430	1500	Closure and departure	UNIVERSITY OF LIMPOPO/NDOH	UNIVERSITY OF LIMPOPO