Network for Education and Support in Immunisation

Saving lives through immunisation
List of abbreviations
Foreword
Highlights 2015
About NESI
Chapter 1: Education and Training
  1.1. In-service training
  1.2. Pre-service training
  1.3. Development of interactive training materials
Chapter 2: Technical support: Institutional strengthening
Chapter 3: Networking and advocacy
  3.1. Meetings
  3.2. Symposia
NESI Oversight Committee Meeting
Colofon
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADVAC</td>
<td>Advanced Course of Vaccinology</td>
</tr>
<tr>
<td>AMP</td>
<td>Agence de Médecine Préventive</td>
</tr>
<tr>
<td>ARCC</td>
<td>African Regional Certification Committee</td>
</tr>
<tr>
<td>BMGF</td>
<td>Bill and Melinda Gates Foundation</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td>DoV</td>
<td>Decade of Vaccines</td>
</tr>
<tr>
<td>DTP</td>
<td>Diphtheria-Tetanus-Pertussis</td>
</tr>
<tr>
<td>ECTS</td>
<td>European Credit and Transfer Accumulation System</td>
</tr>
<tr>
<td>EPI</td>
<td>Expanded Programme on Immunization</td>
</tr>
<tr>
<td>GIVS</td>
<td>Global Immunisation Vision and Strategy</td>
</tr>
<tr>
<td>GVAP</td>
<td>Global Vaccine Action Plan</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>HPV</td>
<td>Human Papillomavirus</td>
</tr>
<tr>
<td>IMCI</td>
<td>Integrated Management of Childhood Illnesses</td>
</tr>
<tr>
<td>ITMIH</td>
<td>Institute of Tropical Medicine and International Health</td>
</tr>
<tr>
<td>JSI</td>
<td>John Snow, Inc.</td>
</tr>
<tr>
<td>LIVE</td>
<td>Leading International Vaccinology Education</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goal</td>
</tr>
<tr>
<td>MLM</td>
<td>Mid-Level Management</td>
</tr>
<tr>
<td>MoH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>MoU</td>
<td>Memorandum of Understanding</td>
</tr>
<tr>
<td>MPH</td>
<td>Master of Public Health</td>
</tr>
<tr>
<td>MSc</td>
<td>Master of Science</td>
</tr>
<tr>
<td>NESI</td>
<td>Network for Education and Support in Immunisation</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
</tr>
<tr>
<td>NITAG</td>
<td>National Immunisation Technical Advisory Group</td>
</tr>
<tr>
<td>OC</td>
<td>Oversight Committee</td>
</tr>
<tr>
<td>PhD</td>
<td>Doctor of Philosophy</td>
</tr>
<tr>
<td>SAGE</td>
<td>Strategic Advisory Group of Experts</td>
</tr>
<tr>
<td>SA-MRC</td>
<td>South African Medical Research Council</td>
</tr>
<tr>
<td>SAVIC</td>
<td>South African Vaccination and Immunisation Centre</td>
</tr>
<tr>
<td>SMU</td>
<td>Sefako Makgatho Health Sciences University</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>SOMIPEV</td>
<td>Société Marocaine d'Infectiologie Pédiatrique et de Vaccinologie</td>
</tr>
<tr>
<td>TFI</td>
<td>Task Force on Immunisation</td>
</tr>
<tr>
<td>ToT</td>
<td>Training of Trainers</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children's Fund</td>
</tr>
<tr>
<td>UNPAD</td>
<td>University of Padjadjaran</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>VACFA</td>
<td>Vaccines for Africa Initiative</td>
</tr>
<tr>
<td>VLIR-UOS</td>
<td>Flemish Inter-University Council</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>WHO/AFRO</td>
<td>WHO Regional Office for Africa</td>
</tr>
<tr>
<td>WHO/EMRO</td>
<td>WHO Regional Office for the Eastern Mediterranean</td>
</tr>
<tr>
<td>WHO/HQ</td>
<td>WHO Headquarters</td>
</tr>
<tr>
<td>WHO/IVB</td>
<td>WHO Department on Immunisation, Vaccines and Biologicals</td>
</tr>
<tr>
<td>WHO/IVE</td>
<td>WHO Immunisation, Vaccines and Emergencies cluster</td>
</tr>
</tbody>
</table>
Dear colleagues,

We are pleased to present the annual report of the Network for Education and Support in Immunisation (NESI) highlighting the achievements of 2015.

As human resources play a crucial role in the delivery of quality immunisation services to the public, NESI focusses on capacity building, education and training, and institutional strengthening through partnerships with WHO, academic institutions, Ministries of Health and other partners. NESI’s pre- and in-service educational programmes are tailored to the needs of the immunisation programme in the respective partner countries, with country ownership as guiding principle.

We are currently implementing the two-year project on “Strengthening country adolescent immunisation programmes and health systems in the African Region using HPV vaccine as a case study”. The project was jointly developed with the South African Vaccination and Immunisation Centre (SAVIC), based at Sefako Makgatho Health Sciences University and the South African Medical Research Council (SA-MRC) in South Africa. A continuation of this project has been guaranteed for 2016 thanks to successful proposal writing.

Due to some changes in the NESI Oversight Committee, a new chair was elected during 2015. Professor Fredrick Were was unanimously elected and kindly agreed to take up the role as NESI chair for the Oversight Committee. Professor Were is Professor of Pediatrics and Dean School of Medicine at the University of Nairobi and member of SAGE and TFI and many other committees. We are confident that his knowledge, experience and vision will greatly contribute to the achievements of the Network.

This Annual Report summarises the activities of NESI during the year 2015 in capacity building in immunisation. Our achievements are only made possible thanks to the commitment and support from all our partners in immunisation, including universities, governments, multilateral and bilateral organisations, industry, non-governmental organisations and alliances. We especially like to thank our partners at the focal offices: SAVIC/Sefako Makgatho Health Sciences University, Société Marocaine d’Infectiologie Pédiatrique et de Vaccinologie (SOMIPEV), University of Jordan and University of Padjadjaran, Indonesia. We are looking forward to continue this successful collaboration with all our partners, and deliver our commitment towards the Global Vaccine Action Plan and the Sustainable Development Goals.

Sincerely,

Dr Carine Dochez
Programme Director
The Network for Education and Support in Immunisation (NESI) was established in 2002. NESI was built on the experience of the “International Network for Eastern and Southern Africa on Hepatitis B Vaccination”, which was established in 1999 by five universities in Eastern and Southern Africa (Kenya, Tanzania, Zambia, Zimbabwe and South Africa), Ministries of Health in Africa and the University of Antwerp. The purpose of this network was to translate research on hepatitis B through capacity building and advocacy into universal access to hepatitis B vaccination in the partner countries.

With the development of new vaccines and increased commitment by development partners and private sector initiatives to strengthen vaccine supply and immunisation services, there are more opportunities to prevent more diseases in more people. This led to the establishment of NESI, which is a collaborative network of capacity building for the strengthening of existing immunisation programmes and introduction of new vaccines, with a broad technical scope and wide geographical focus.

NESI closely coordinates its activities with the World Health Organization (WHO), the United Nations Children’s Fund (UNICEF), Gavi, Non-Governmental Organisations (NGOs), the private sector, and other immunisation stakeholders.

Due to its links with universities and other health professional training institutions, which are vital to achieving sustainable capacity and competence building in the field of vaccinology, NESI is unique in its attention on pre-service training, particularly on the development of curricula and training for nurses, medical doctors, pharmacists, public health specialists and other related health professionals.

A Memorandum of Understanding between NESI and the WHO Regional Office for Africa (WHO/AFRO) clearly defines the overall goals and actions of NESI in the area of capacity building. With the Eastern Mediterranean Region of WHO (WHO/EMRO), NESI works on the basis of an annual joint plan of action for key areas of capacity building. This validates the position of NESI as an integral partner in capacity building within the WHO African and Eastern Mediterranean Regions. Collaboration with the South-East Asian Region has been successfully initiated during 2014.

Focal offices at partner universities/organisations in the different WHO Regions play a key role in implementing the activities of the Network.
Mission

The mission of NESI is to improve the quality and sustainability of immunisation programmes and services in low- and middle-income countries through capacity building, education and training, institutional strengthening and building international networks. NESI aims to build the capacity of Ministry of Health managers and staff working in the Expanded Programme on Immunization (EPI) in their respective countries, as well as to improve pre-service and post-graduate training at the different faculties of health training institutions involved in immunisation, including medicine, nursing, pharmacy, and public health.

Strategies

To accomplish its mission, NESI engages in a number of activities, which are grouped into four main areas: education and training, technical support, operational research and networking and advocacy. NESI offers the following in each area:

1. Education and training
   - Organises training events in collaboration with other organisations;
   - Monitors and evaluates currently implemented education and training programmes;
   - Validates the content of educational and training materials;
   - Develops up-to-date, high-quality training materials for different audiences involved in immunisation programmes; and
   - Provides support to universities to improve the curriculum of health professionals involved in immunisation and advises on regular refresher courses in collaboration with Ministries of Health (MoH).

2. Technical support
   - Performs training needs assessments in collaboration with academic and other partners;
   - Assists countries in developing comprehensive training plans as part of their Multi-Year Plans;
   - Provides support to country staff to implement training activities; and
   - Supports institutional strengthening to improve national and regional capacity to deliver education and training.
3. Operational research

- Supervises MSc, MPH and PhD students;
- Evaluates pre-service EPI curriculum at health training institutions;
- Conducts post introduction evaluations;
- Evaluates effectiveness and impact of training activities; and
- Writes scientific and review articles.

4. Networking and advocacy

- Facilitates a forum to discuss and coordinate actions related to education, training, and support for immunisation programmes in low- and middle-income countries;
- Maintains a network of specialists drawn from international organisations, universities in both industrialised and developing countries, national immunisation programmes, NGOs, industry, and other relevant stakeholders, to deliver high-quality training in all aspects of immunisation and at different stages of implementation of immunisation programmes;
- Collaborates with local, regional, and global training initiatives to advocate for better education and training; and
- Offers a website that houses training materials and links to other relevant sites.

Structure

NESI is a partnership between the University of Antwerp and the public and private sector. An Executive Secretariat coordinates and implements activities for the Network. The Executive Secretariat is based at the Department of Epidemiology and Social Medicine at the University of Antwerp, Belgium.

The Executive Secretariat reports to the Oversight Committee, which advises on strategy and budget allocation, and reviews outcomes. The Oversight Committee is composed of representatives from this partnership, representatives of partner universities and international health organisations and alliances, and international vaccinology experts.

NESI has full operational and scientific independence.

Funding

NESI is supported by public and private funds, and donations. NESI receives an educational grant from GlaxoSmithKline; funds from the University of Antwerp which also provides infrastructure, ICT, administrative and legal support; funds from the Flemish Inter-University Council (VLIR-UOS); and funds from the Flemish Government.
Human resources are key to providing good quality healthcare services to the population. A national immunisation programme relies on the support of well-trained medical and nursing staff, so that all children will benefit of receiving the right vaccine at the right time in the right way. Therefore, training of health personnel must be relevant to national needs. Education and training must be coordinated and integrated with the developing health system as it moves towards meeting the objectives of health for all in the 21st century included in the Millennium Development Goals (MDGs), in the Global Immunisation Vision and Strategy (GIVS) adopted by the 58th World Health Assembly in 2005, and in the Global Vaccine Action Plan (GVAP) outlined in the Decade of Vaccines (DoV) adopted at the 65th World Health Assembly in 2012.

Attention needs to be given to both in-service and pre-service education and training. National immunisation programme reviews and training needs assessments indicate that serious bottlenecks exist between in-service and pre-service training: e.g. EPI content is not outlined in the pre-service curricula or is incomplete or outdated; health training institutions often lack demonstration equipment, as well as current EPI reference materials; time allocation for EPI theory is not always sufficient; some lecturers lack knowledge on current EPI theory and practice.

Providing healthcare workers and academics with up-to-date information on vaccines and immunisation, is key to building the technical and managerial capacity and skills of current and future healthcare workers to deliver quality immunisation services to the public.

1.1. In-service training

To be effective, a national immunisation programme relies on the support of well-informed medical, nursing and support staff. To provide immunisation services of good quality it is essential to have a workforce that is sufficient in numbers, well-educated and trained, adequately deployed and motivated. Evaluation of Mid-Level Management (MLM) courses has clearly shown that the performance of healthcare workers improves after in-service training.

1.1.1. Vaccinology courses

In-service vaccinology courses are key to build national vaccinology expertise by strengthening the capacity of academics in vaccinology (involved in teaching/research related to infectious diseases, mother and child health care, vaccines and immunisation) and to guide policy makers and programme managers to make evidence-based decisions on: (1) immunisation policies and strategies; (2) introduction of new vaccines and technologies; (3) sustaining and strengthening routine immunisation; (4) adjustments of existing immunisation programmes (e.g. adolescent vaccination); (5) adjustments to vaccination schedules; (6) conducting phase 1 to phase 3 clinical trials, and post-marketing surveillance (phase 4 studies).
The target audience of vaccinology courses include:

| Teachers at health training institutions from the different faculties involved in immunisation: medicine, nursing, public health and pharmacy |
| Members of the National Immunisation Technical Advisory Groups (NITAG) |
| EPI managers |
| MoH support staff |
| Staff of multilateral (WHO, UNICEF) and bilateral organisations, and of NGOs |
| MSc/MPH students |

The general objective of the vaccinology course is “to master the basic principles and specificities of a vaccine, how it is developed, produced and utilised, including its use within the EPI programme”.

The vaccinology courses are developed around 9 themes: (1) The scientific basis of vaccinology; (2) Vaccine development and evaluation; (3) Prequalification, registration, production and control; (4) Routine EPI vaccines and optimising the impact of immunisation; (5) New vaccines; (6) Future vaccines; (7) Vaccine safety and cost-effectiveness; (8) Programmatic issues for new vaccine introduction; and (9) Training and research.

Lecturers in the vaccinology courses are leading international vaccinology experts from universities, WHO, UNICEF, Gavi, Ministry of Health and industry.

1.1.1.1. “TropEd” Advanced vaccinology course, Berlin, Germany, January 2015

The TropEd Advanced Vaccinology Course was organised by the Institute of Tropical Medicine and International Health (ITMIH), Berlin, and NESI/University of Antwerp, from 12 to 23 January 2015 in Berlin, Germany. The course is an accredited module (3.5 ECTS credit points) of the TropEd Masters Programme in International Health. TropEd is a network of institutions for higher education in International Health, including European and non-European institutions. The accreditation for the two-weeks course was obtained in October 2013 and is valid until October 2018.

Eighteen students from both industrialised and developing countries attended the course.

Lecturers came from the Universities of Cape Town and the Free State (South Africa), South African Medical Research Council (South Africa), Gavi (Switzerland), Ministry of Health of Ghana, Robert Koch Institute (Germany), Institute of Tropical Medicine and International Health (Germany), Freie Universität Berlin (Germany), London School of Hygiene and Tropical
Teaching methods included seminar-style and interactive lectures, exercises and group work on specific target diseases. A visit was brought to the Robert Koch Institute which oversees Germany’s vaccination programme.

NESI staff gave lectures on the following topics: HPV vaccines; Adolescent vaccination; Immunisation training and education; and Cold chain management. NESI also facilitated the group work on HPV vaccines.

Student evaluation was based on presentation of the group work, a written exam and a written essay on a topic of choice relevant to vaccines and immunisation. The essays were evaluated by the course directors from ITMIH and NESI.

In addition to the Advanced Vaccinology Course, NESI is also involved in lecturing during the Core Course in Berlin, Germany, which runs from September till December each year. NESI is invited to lecture on “Basic Vaccinology”, which is a one-day session during the Core Course.


The 16th Advanced Course of Vaccinology (ADVAC) was organised by Fondation Mérieux and the University of Geneva, at Veyrier-du-Lac, France, from 11 to 22 May 2015.

The ADVAC course is a two-week training programme for decision-makers, academia, industry, governmental and non-governmental agencies, in all fields related to vaccines and immunisation. The course aims to facilitate decision-making in vaccinology by providing participants with a comprehensive overview, from immunology to vaccine development and clinical trials to social, economic, political and ethical issues of vaccination. The 16th ADVAC course was attended by 73 participants from 41 countries, from both developing and industrialised countries.

The course was facilitated by over 60 international lecturers and working group facilitators, all experts in vaccinology. NESI was invited to co-facilitate the working group on “National decision making for immunisation programmes”.

Medicine (UK), WHO/HQ (Switzerland), GlaxoSmithKline (Belgium and Germany) and the University of Antwerp (Belgium).
The 3rd Regional Vaccinology Course for Francophone countries was organised by WHO/AFRO from 12-19 September 2015 in Mbour, Senegal, in collaboration with UNICEF, Stellenbosch University and NESI/University of Antwerp.

A total of 58 participants attended the course, comprising EPI managers, staff of WHO and UNICEF responsible for vaccines and immunisation, lecturers of medical and nursing schools, and members of National Immunisation Technical Advisory Groups (NITAGs) from Benin, Burkina Faso, Burundi, Cameroon, Chad, Central African Republic, Congo, Comoros, Cote d’Ivoire, Democratic Republic of Congo, Gabon, Guinea, Madagascar, Mauritania, Niger, Senegal, and Togo.

The facilitators were from WHO (AFRO and Headquarters), UNICEF, NESI/University of Antwerp (Belgium) and Stellenbosch University (South Africa).

The primary objective of the course was for the participants to master basic immunology concepts and the scientific basis of immunisation, the development of vaccines, introduction of new vaccines and the challenges of the use of current vaccines in African immunisation programmes. The secondary objective was for the participants to acquire knowledge and competencies, to enable them to advise, train and coordinate capacity building activities in vaccines and immunisation in their respective countries.

Each module was followed by group work, to evaluate the acquired understanding and knowledge of participants and to ensure that the course objectives were met. During the last day of the course, eleven countries presented their experiences with pre-service training in vaccinology at their respective institutions. Some new developments in the area of vaccines and immunisation were discussed and the need to update the curricula at training institutions in line with these new developments was stressed.

Participants recommended that WHO and partners should continue to provide support, disseminate the revised EPI prototype curricula and support operational research.

A summary of the course has been published:

1.1.1.4. 11th Annual African vaccinology course, Cape Town, South Africa, November 2015

The 11th Annual African vaccinology course was organised in Cape Town, South Africa, from 9 to 13 November 2015, and was hosted by the Vaccines for Africa Initiative (VACFA), based at the University of Cape Town.

The objectives of the course were to introduce participants to the various disciplines associated with vaccinology including immunology, vaccine development, microbiology, epidemiology, clinical trials, safety, ethics, evidence-based medicine, advocacy and communication and introduction of new vaccines. At the end of the course, participants will have the necessary expertise to support national immunisation programmes, and to support phase I-IV vaccine trials in Africa.

The course was attended by 62 participants from 27 African countries (representing the five regions: North, South, East, West and Central), with the following profile: EPI managers and staff, medical doctors, nurses, public health specialists, academics and scientists working in the field of vaccinology.

Lecturers included experts in the field of vaccinology from academia, industry and private practice. NESI was invited by VACFA to give lectures on the following topics: Global Vaccine Action Plan (GVAP); and Vaccination schedules: past, present and future. NESI was also part of the “meet the experts” session; a session that allowed for questions and discussions.
1.1.2. Interactive workshops

1.1.2.1. Improving skills and institutional capacity to strengthen country adolescent immunisation programmes and health systems in the African region, Pretoria, South Africa, March 2015

The South African Vaccination and Immunisation Centre (SAVIC)/Sefako Makgatho Health Sciences University, the South African Medical Research Council (SA-MRC) and the Network for Education and Support in Immunisation (NESI)/University of Antwerp, organised a Symposium on “Implementing HPV vaccination in Africa: opportunities for strengthening adolescent health” in Pretoria, South Africa, on 24 March 2015.

On 25 March 2015, a Stakeholders Meeting was organised for the joint SAVIC/NESI Project “Improving skills and institutional capacity to strengthen country adolescent immunisation programmes and health systems in the African Region”.

The Symposium (24 March 2015) was attended by a total of 57 delegates from 13 countries (Belgium, Congo-Brazzaville, Ghana, Indonesia, Jordan, Senegal, South Africa, Swaziland, Switzerland, Uganda, United Kingdom, Zambia, Zimbabwe). The delegates were from national (SA-MRC) and international agencies (WHO/AFRO and Gavi), academic institutions, Ministries of Health, and the vaccine industry.

The objectives of the Symposium were to:

- **A.** Update delegates on the global burden of cervical cancer with an emphasis on primary and secondary prevention.
- **B.** Discuss the introduction of HPV vaccination programmes in Africa with an emphasis on integrating HPV vaccination with other adolescent health interventions, and highlighting ethical considerations.
- **C.** Share country experiences with advocacy, communication and social mobilization towards the uptake of HPV vaccination.
- **D.** Share country experiences with programmatic and other issues when introducing HPV vaccination programmes.
The presentations during the Symposium highlighted the current status, best practices and gaps of HPV vaccine introduction and other adolescent health interventions in African countries. Closing remarks were presented by the Representative of the Government of Flanders, and the Director of Research of Sefako Makgatho Health Sciences University. This “taking stock” symposium guided us during the stakeholders meeting the next day, where a roadmap was drafted for the upcoming workshops within the joint SAVIC/NESI proposal “Improving skills and institutional capacity to strengthen country adolescent immunisation programmes and health systems in the African Region”.

The Stakeholders Meeting (25 March 2015) was attended by a total of 22 delegates from 10 countries (Belgium, Congo-Brazzaville, Ghana, South Africa, Swaziland, Switzerland, Uganda, United Kingdom, Zambia, Zimbabwe). The delegates were from universities (London School of Hygiene and Tropical Medicine; NESI/University of Antwerp; SAVIC/Sefako Makgatho Health Sciences University; Stellenbosch University; University of the Free State; University of Ghent); Ministries of Health (Ghana, Swaziland, Uganda, Zambia and Zimbabwe); national (SA-MRC) and international (Gavi and WHO/AFRO) agencies.

The objectives of the Stakeholders Meeting were to:

A. Compile/develop training materials that can be easily adapted to specific country needs and used as national resources to facilitate introduction of HPV vaccination and other adolescent health interventions in the African region.

B. Develop a common framework to guide cascading of training in various countries, with the overall objective of promoting successful and effective introduction of HPV vaccination and other adolescent health interventions.

During the Stakeholders Meeting a roadmap was drafted to deliver the workshops within the joint SAVIC/NESI proposal “Improving skills and institutional capacity to strengthen country adolescent immunisation programmes and health systems in the African Region”. A first workshop was organised for the Southern African countries, being held in Johannesburg, South Africa, from 5 to 7 October 2015. A second workshop will be organised for the Eastern African countries in Nairobi, Kenya, in March 2016.
The expected spin-offs of the joint SAVIC/NESI project include: (a) Establish a network that will promote interest of incorporating the HPV vaccine into the national immunisation programmes; (b) Contribute to revitalisation and strengthening of school-based health programmes as delivery platform of adolescent immunisation services and other adolescent health intervention packages; and (c) Pave the way for future adolescent vaccination programmes.

1.1.2.2. Implementing HPV vaccination in Africa: opportunities for strengthening adolescent health, Johannesburg, South Africa, October 2015

The workshop on “Implementing HPV vaccination in Africa: opportunities for strengthening adolescent health” was organised by SAVIC/Sefako Makgatho Health Sciences University, South African Medical Research Council and NESI/University of Antwerp in Johannesburg, South Africa, from 5 to 7 October 2015. The workshop was officially opened by the Vice-Chancellor of Sefako Makgatho Health Sciences University.

A total of 54 delegates (participants and facilitators) participated in the workshop. Participants included: representatives of the Ministry of Health of Botswana, Malawi, South Africa, Swaziland, Zambia and Zimbabwe; a representative of the Ministry of Primary and Secondary Education of Zimbabwe; and WHO representatives of Malawi, Mozambique, Namibia, South Africa and Zimbabwe.

Facilitators were from: WHO, Gavi, South African Medical Research Council and academia (University of Cape Town, Stellenbosch University, University of the Witwatersrand, University of the Free State, Sefako Makgatho Health Sciences University, London School of Hygiene and Tropical Medicine and University of Antwerp).

The objectives of the workshop were to:

A. Promote successful and effective introduction of HPV vaccination and other adolescent health interventions in the southern African region.

B. Create a multi-disciplinary resourceful team of experts to support and advocate for the introduction of HPV vaccines and other adolescent health interventions in the southern African region.

C. Increase synergy between academics, educators and Ministries of Health to revive and strengthen school-based health programmes as delivery platforms of adolescent immunisation services in the southern African region.

The first day of the workshop comprised presentations highlighting key aspects of cervical cancer, HPV screening, HPV vaccines, adolescent health interventions, delivery platform for HPV vaccination, and effective communication strategies for building public trust in HPV vaccination.

The second day of the workshop focused on country presentations which were grouped in three sessions: (a) countries with a national HPV vaccination programme; (b) countries with a demonstration project and (c) countries planning for HPV vaccine introduction.
During the third day of the workshop country group presentations were made, highlighting for each country the strengths, gaps and challenges based on the feedback received during the individual country presentations on the second day. Countries also identified opportunities to collaborate in assisting each other in successful implementation of HPV vaccination and other adolescent health services. The last session of the workshop focused on monitoring and evaluation, the importance of a cancer registry and measuring the impact of HPV vaccination. Closing remarks were given by the South African National Department of Health Chief Director: Child, Youth and School Health, the Dean of the Faculty of Health Sciences of SMU and the Deputy Representative of the Government of Flanders.

The workshop was well appreciated by the participants as proven by the daily evaluations. Providing a forum for the countries to present their current status of HPV vaccination and exchange best practices and challenges, resulted in building an international multi-disciplinary network of experts and in increased ownership of the workshop.

A summary of the workshop has been published:


1.2. Pre-Service training

To be effective, a national immunisation programme must have the support of well-trained medical and nursing staff. The incorporation of EPI into undergraduate medical education, nursing/midwifery, and other health professional training programmes is important towards improving and strengthening immunisation service delivery, logistics, surveillance, communication and management practices. Clinical and public health training that incorporates the learning objectives of EPI will enable students to develop a firm basis of core knowledge and skills.

1.2.1. Workshop to peer review the AFRO EPI Prototype curricula and revised MLM modules and handouts, Congo-Brazzaville, April 2015

A workshop to peer review the AFRO EPI prototype curricula for medical and nursing/midwifery schools and the revised MLM modules and hand-outs, was organised by WHO/AFRO in Congo-Brazzaville from 7 to 15 April 2015.
Training needs assessments conducted in various countries during the last decade pointed out several bottlenecks in EPI training at health training institutions. To facilitate the systematic revision of EPI curricula at training institutions, two EPI prototype curricula (one for medical schools and one for nursing/midwifery schools) were developed in 2006 by WHO/AFRO, NESI/University of Antwerp, UNICEF, USAID and Gavi and were revised in 2013/2014. Both prototype curricula are available in English and French. The general objective of the EPI prototype curricula is: “to strengthen the teaching and learning of immunisation within the existing curriculum for pre-service education programmes for medical doctors, nurses/midwives and other health professionals”.

The objective of the workshop was to review the EPI prototype curricula for doctors and nurses and the EPI MLM modules to ensure the information is up-to-date with new developments in vaccines and immunisation, to harmonise the content, and develop final versions ready for editing and subsequent dissemination and use. These standardised training materials were revised and pretested during 2013/2014.

The participants of the workshops were divided in two groups: one group addressing the EPI prototype curricula and one group addressing the EPI MLM modules. Each day a plenary session was organised to review progress made and to ensure consistency between both types of documents.

Specific tasks for each group included:

- To ensure strict coherence of reference pedagogical format
- To ensure harmonisation of headings, exercises, figures and tables
- To ensure comprehensive compilation of acronyms
- To ensure comprehensive compilation of updated and appropriate references
- To make propositions of adequate and updated illustrations
- To ensure finalisation of the table of contents of respective reviewed documents
- To ensure harmonisation of Portuguese (only MLM), English and French versions of all documents
- Ensure alignment with current immunisation policies and strategies: GIVS/DoV/GVAP, African Regional Strategic Plan for Immunisation

The group reviewing the EPI prototype curricula comprised of six experts from the following institutions: Kwame Nkrumah University of Science & Technology (Ghana); Kenya Medical Training College (Kenya); JSI (Kenya and USA); WHO (Malawi); and NESI (Belgium). Good progress was made with reviewing and harmonising the content of the respective documents, which are now ready for final editing and subsequent dissemination.

Recommendations were made by workshop participants to scale up the implementation of the revised EPI prototype curricula by: equipping training institutions with updated training materials; systematically organising ToT workshops on the use of the revised EPI prototype curricula; contributing/participating in teaching, field placement and evaluation activities by immunisation partners; developing a dedicated website with updated training and reference
materials. The NESI website could play a crucial role in this. At the same time, training institutions are encouraged to allow for adequate time for teaching EPI theory and running practical sessions, while strategies should be developed for more effective supervision of these practical training sessions.

1.2.2. Technical competencies of nurse lecturers on expanded programme on immunization in Kenya Medical Training College, Kenya

Kenya Medical Training College (KMTC), in collaboration with NESI/University of Antwerp, initiated a field based study to assess the “technical competencies of nurse lecturers on the Expanded Programme on Immunization in Kenya Medical Training College”. With its network of 31 colleges across the country, KMTC is one of the leading health training institutions training up to 90% of health workforce in Kenya. This study is a follow-up of the evaluations carried out in Kenya in 2011, assessing the status of EPI training at pre-service health training institutions. In Kenya, KMTC is taking the lead in driving the EPI pre-service curriculum implementation at the nursing schools.

The aim of the study was to determine the technical competences of nurse lecturers in EPI at KMTC. The specific objectives were to determine the socio-demographic, individual and institutional factors that could influence EPI competencies among nurse tutors. Ethical approval was obtained by the KMTC ethical research committee and by the National Commission of Science and Technology and Innovation. In addition, all participants signed a consent letter. A descriptive cross sectional study design was used to collect quantitative data using structured questionnaires for nurse tutors and qualitative data was obtained using key informant interviews, focus group discussions and observations. Purposive sampling was used to select 117 nurse tutors from 23 nurse training colleges. Quantitative data were analysed into percentage frequencies and cross tabulations to compare variables. Qualitative data were analysed according to themes and sub-themes and were used to support the quantitative data.

The study shows that socio-demographic, individual characteristics and institutional factors directly or indirectly influence technical competences of the nurse tutors in the implementation of the EPI pre-service training programme. The main findings of the study indicate that: (1) a significant number of respondents did not recently participate in refresher courses aiming at boosting tutors’ competencies in teaching EPI; and (2) institutional factors like staffing, numbers of students, and quality of teaching materials and equipment, directly affect the nurse tutors performance in teaching EPI.

Therefore, recommendations identified to improve the quality of EPI training given by nurse tutors at KMTC include: (1) development of a staff capacity improvement programme to ensure continued education of the EPI tutors, while nurse tutors are encouraged to assume personal responsibility for their own academic advancement; (2) development of clear staff
profiles with corresponding required academic competencies; (3) ensuring adequate training facilities, teaching materials and equipment; (4) standardising the number of hours of EPI theory and clinical training; and (5) standardising the maximum number of students per class.

The results of the study will be communicated to all participating colleges during departmental meetings and Academic Board meetings, and will be further disseminated through symposium presentations and publications.

1.3. Development of interactive training materials

Providing healthcare workers and academics with up-to-date training materials on vaccines and immunisation is one of the key activities of NESI. Training materials are being developed for different levels of the immunisation programme, capturing the needs of all staff. The training materials should be easily accessible and available for the intended user. As the immunisation programme is characterised by rapid progression, regular revision of training materials will be necessary.

Training methods are evolving over the years and the classical classroom training could be complemented by the use of audio-visual training materials or interactive resources. These training tools can be used during face-to-face training to demonstrate certain techniques or procedures, but can also be used as a self-learning tool. They have the advantage that the information given is consistent minimising the risk of messages being diluted, any section can be repeated at any time and procedures are easier to understand when they are demonstrated. Questions and answers after each section reinforce the learning and test the users’ knowledge. The videos provide real-life examples of healthcare workers at work and put procedures into context.

1.3.1. Workshop to review the findings of the field testing of the EPI/IMCI interactive training tool, Congo-Brazzaville, April 2015

The workshop to review the findings of the field testing of the EPI/IMCI interactive training tool was organised by WHO/AFRO in Congo-Brazzaville, from 13 to 15 April 2015.

During 2013/2014, an interactive resource on immunisation and Integrated Management of Childhood Illnesses (IMCI) was developed by WHO/AFRO, in collaboration with NESI and ITEM interactive. This interactive resource is mainly targeting healthcare workers at the peripheral level, but can also be used for training at nursing schools. The EPI/IMCI interactive resource is a comprehensive training package including: video chapters with narrations in three languages; questions and answers section before and after each chapter to reinforce key messages; references; glossary; transcript of video chapters; and certificate after completion of the programme. The interactive resource is supplemented by a pocket guide.

After completion of the draft EPI/IMCI interactive training tool, it was piloted during 2014 in three countries: Congo-Brazzaville, Sao Tomé and Zambia. Following in-depth review of the draft EPI/IMCI interactive resource by partners and field testing in the three countries, a workshop was organised in April 2015 to compile all feedback and develop the final version of the training tool.
The workshop addressed the key observations and issues arising from piloting the training tool in the three countries. Also the key findings from evaluating the performance of healthcare workers after training with the EPI/IMCI tool was discussed. Taking all feedback from the piloting phase into consideration, each chapter was reviewed in detail and recommendations for improvement were made if necessary.

The workshop concluded with a discussion on next steps including the timeline to finalise the training tool, and how to disseminate the tool.
To ensure the sustainability of the Network’s activities and to increase its reach and impact, focal offices are being established in the different WHO Regions. Institutional strengthening will allow to share efforts in strengthening immunisation programmes through capacity building, education and training.

Focal offices at partner universities/organisations, and NESI shall collaborate in the following areas:

- Conduct training needs assessment at pre- and in-service training institutions;
- In-service training: development of training materials and organisation/facilitation of vaccinology courses/workshops;
- Pre-service training: evaluate the EPI curriculum at medical and nursing schools and assist the schools with updating their curriculum;
- Advocate for good interaction between the immunisation programme and academic institutions;
- Joint proposal writing;
- Exchange of students;
- Joint publications.

A representative of each focal office participates in the annual NESI Oversight Committee Meeting as a core member.
2.1. South African Vaccination and Immunisation Centre

The South African Vaccination and Immunisation Centre (SAVIC), based at Sefako Makgatho Health Sciences University (SMU), South Africa, functions as focal office for the Southern African Region since January 2012.

SAVIC and NESI share a common goal of improving the quality and sustainability of immunisation programmes, through education and training; and have a long working relationship spanning over more than 12 years. SAVIC was established at the Medical University of Southern Africa (now called Sefako Makgatho Health Sciences University) in 2003. It is a network of partners in the field of vaccination and immunisation. SAVIC is a Public Private Academic alliance between the South African Department of Health, Vaccine Industry, Academic institutions and other stakeholders. SAVIC activities are undertaken in close collaboration with the South African National Department of Health, NESI/University of Antwerp, WHO and other partners. The strategic operational areas of SAVIC include Education and Training, Operational Research and Technical Support and Advocacy.

Joint activities

Among the many activities conducted by SAVIC in 2015, joint SAVIC-NESI activities included:

- Participation in the TropEd Advanced Vaccinology Course in Berlin, Germany, from 13-22 January 2015. SAVIC facilitated the group work on rotavirus vaccines and gave lectures on: Immunising the immuno-compromised; Rotavirus vaccines; HIV vaccines (see section 1.1.1.1.).

- Co-organiser and presenter at Symposium and Stakeholders Meeting on “Improving skills and institutional capacity to strengthen country adolescent immunisation programmes and health systems in the African Region”, 24-25 March 2015, Pretoria, South Africa. Organised by SAVIC/Sefako Makgatho Health Sciences University, South African Medical Research Council and NESI/University of Antwerp (see section 1.1.2.1.).

- Co-organiser and presenter at workshop on “Implementing HPV vaccination in Africa: opportunities for strengthening adolescent health”, 5-7 October 2015, Johannesburg, South Africa. Organised by SAVIC/Sefako Makgatho Health Sciences University, South African Medical Research Council and NESI/University of Antwerp (see section 1.1.2.2.).

- Two poster presentations during “30th International Papillomavirus Conference”, 17-21 September 2015, Lisbon, Portugal (see section 3.2.1.).

Joint proposal writing

During 2015, SAVIC and NESI have successfully written a joint proposal “Strengthening HPV vaccination and adolescent health programmes in Africa”. The proposal will receive funding from the Flemish Inter-University Council (VLIR-UOS) and will be implemented in 2016.

NESI is also collaborating with SAVIC in a project on “Anti-vaccination lobbying in South Africa”. The project proposal was submitted to the South African National Research Foundation during 2015, and in December 2015 a three-year grant was awarded for this project.

2.2. Société Marocaine d’Infectiologie Pediatrique et de Vaccinologie

SOMIPEV (Société Marocaine d’Infectiologie Pédiatrique et de Vaccinologie) is a non-profit association of paediatrics, chaired by the Dean of the faculty of Medicine, Université Cadi Ayyad, Marrakech, Morocco. This association assembles all Moroccan expertise in the field of paediatric infectious diseases and vaccinology.

The objectives of SOMIPEV are: (1) to improve and share knowledge of paediatric infectious diseases and vaccinology; (2) to strengthen health education for the prevention of infectious diseases in Morocco; (3) to strengthen education and training in medicine, nursing, public health and pharmacy; (4) to create an international scientific platform in this field; (5) to translate research into better prevention of paediatric infectious diseases in Morocco; and (6) to guide and assess the impact of national vaccination strategies of the Ministry of Health.

Given the common goals of SOMIPEV and NESI/University of Antwerp, a Memorandum of Understanding (MoU) has been signed in 2013 to join efforts in supporting the national immunisation programme in Morocco through capacity building, education and training. Following two successful workshops in 2013 to develop the roadmap for education and training activities at both pre- and in-service level for strengthening the national immunisation programme in Morocco, 2014 was devoted to the development of training manuals.

During 2015, three training workshops have been organised in the framework of the joint SOMIPEV-NESI collaboration. During each workshop, the respective training manuals developed in 2014 have been distributed to participants and facilitators.
SOMIPEV received approval from the Ministry of Health to train all staff working in the national immunisation programme in Morocco.

Within this framework, a **first vaccinology workshop was organised on 14 May 2015 in Marrakech.** This first vaccinology workshop was inaugurated by the Director of Health of Marrakech. The workshop was facilitated by MoH and SOMIPEV. Participants included 36 medical doctors and health staff from the following provinces/prefectures (4 participants each): Bénimellal, Azilal, Fequih bensaleh, Marrakech, Haouz, Essaouira, Chichaoua, Elkelaa des Sraghna, Rhamna. The aim of the training workshop was to update the knowledge and skills of participants on vaccines and immunisation within the framework of the national immunisation programme. During this workshop, participants also discussed the action plan to train all health professionals active in immunisation to improve vaccination coverage in Morocco.

![First Vaccinology Workshop in Marrakech](image)

A **second vaccinology workshop within this context was organised on 17 December 2015 in Rabat,** again facilitated by SOMIPEV and MoH. The workshop was attended by 33 participants from two regions: Rabat (19) and Kénitra (14).

![Second Vaccinology Workshop in Rabat](image)

A workshop focussing on the pre-service EPI curriculum at medical schools was organised in Casablanca on 13 June 2015. The workshop was facilitated by MoH, SOMIPEV and NESI. A total of 18 representatives of Medical Faculties of the following universities participated in the workshop: Marrakech (3), Casablanca (5), Rabat (2), Ouida (4), Tanger (1) and Fès (3). The main objective of the workshop was to harmonise the content of the vaccinology modules among all medical faculties. A consensus was reached on the content of the vaccinology training and how to deliver the training.
2.3. UNIVERSITY OF JORDAN

The first joint project between the University of Jordan and NESI/University of Antwerp, is the development of an **Immunisation newsletter/website**.

Vaccines and immunisation are considered to be one of the most important and cost effective preventive health measures. While the number of vaccines used to be limited, often administered primarily during infancy or early childhood, the number of vaccines that are routinely recommended for children has almost doubled in the past two decades and the host range has also increased to include adolescents, adults and even the elderly. This has increased both the number of vaccines administered routinely as well as including a much larger part of the population that are targeted to receive vaccines on a wide scale. In addition, many special hosts, such as the immune-compromised and the chronically ill patients, such as patients with diabetes, renal failure and cardiac diseases, are candidates to receive special vaccines that help prevent diseases such as pneumonia which cause morbidity and mortality decreasing the benefit from their relatively costly medical care.

In order to help the medical community and healthcare workers, as well as the general public to be well-informed, a newsletter will be published online to have the maximum distribution and to help upgrade the knowledge of the public about vaccines and immunisation. The issues to be discussed will be mainly directed at the EMRO Region, however it will include news items about other regions, as well as provide timely information about the different vaccines that are being introduced in the Region and other parts of the world.

Each issue of the newsletter will provide vaccines and immunisation insights from the experts and the latest news from the Region and beyond. The newsletter should act as an educational platform, highlighting the latest immunisation trends. The website supporting the newsletter will provide e.g. useful links, info-graphics and videos.

2.4. University of Padjadjaran, Bandung, Indonesia

The University of Antwerp has a long-standing collaboration with the University of Padjadjaran (UNPAD) in Bandung, Indonesia, with activities initiated in the early 1980’s. Priority domain of collaboration between the Faculty of Medicine of UNPAD and the Department of Epidemiology and Social Medicine of the University of Antwerp was institutional strengthening and capacity building in teaching and research, formalised through regularly updated Memoranda of Understanding. An interdepartmental Medical Research Unit was established at UNPAD which was highly active in education and training in (clinical) epidemiology and medical statistics, evidence-based medicine/clinical trials and health research development in general. Research led to numerous publications, MSc and PhD degrees. Of the two studies in neonates in South-East Asia with recombinant hepatitis B vaccine, one was implemented in Bangkok, Thailand, and the second one in Bandung, Indonesia. The Faculty of Medicine of UNPAD has grown tremendously in the last decades in research and training capacity and capability, and substantial funding was attracted from national and mainly international resources.
Within the scope of this MoU, the Faculty of Medicine and Faculty of Nursing of UNPAD and NESI/University of Antwerp, strengthened the collaboration in the area of vaccine-preventable diseases. The South-East Asian Region is the one most lagging behind regarding new vaccine introduction and immunisation programme strengthening. This has considerable impact on child morbidity and mortality, as by far the greatest birth cohorts are in this region. Strengthening national immunisation programmes and supporting the introduction of new vaccines will further reduce the morbidity and mortality of vaccine-preventable diseases.

A joint operational research study entitled “Evaluation of the curriculum on immunisation at nursing and midwifery schools in West Java Province, Indonesia” was initiated during 2015. The objectives of the study are to assess the EPI curricula and the knowledge in EPI of lecturers and students at nursing and midwifery schools (public and private). Ethical approval for the study was obtained from the Health Research Ethics Committee of the Faculty of Medicine of UNPAD.

During a preparatory visit of NESI to UNPAD in November 2015, the study was presented to the members of the Faculty of Nursing. The questionnaires developed for conducting the evaluation were piloted and finalised, and practical agreements were made for the data collection scheduled to take place in January 2016. The data will be collected through semi-structured interviews and focus group discussions with school directors, lecturers, instructors and students. The study team will include two medical students of the University of Antwerp, participating in the study in the framework of their master thesis, together with two tutors of the Faculty of Nursing of UNPAD.
NESI works with both the public and private sector to develop and deliver high-quality education and training programmes on vaccines and immunisation. Through networking and advocacy NESI aims to align the different stakeholders in immunisation to achieve faster and coordinated introduction of new and under-utilised vaccines and new technologies. An international network is created for sharing experiences and best practices.

NESI is committed to providing up-to-date information on vaccines and immunisation. The NESI website (www.nesi.be) plays an important role in the dissemination of this information. The website hosts high-quality training materials, which can be downloaded if required.

A mailing list linked to the human resources and alumni database has been established, in order to send out news updates and updated training materials.

Participating in networking meetings is an important opportunity for NESI to discuss and plan collaborative activities, to share experiences with other immunisation partners, and to receive latest updates and recommendations on vaccines and immunisation, which can immediately be incorporated in our education and training programmes.

3.1. Meetings

3.1.1. WHO/AFRO Immunisation Partners Meeting, Congo-Brazzaville, March 2015

The Immunisation Partners Meetings was organised by WHO/AFRO from 2 to 3 March 2015, in Congo-Brazzaville.

The meeting was attended by 80 participants: WHO and UNICEF staff; representatives from the Immunisation Advisory bodies, namely, the Task Force on Immunisation (TFI), the African Regional Certification Committee (ARCC), the Measles and Rubella Technical Advisory Group; and other immunisation partners: BMGF, CDC, Gavi, Médecins Sans Frontières, NESI, Rotary International and USAID.

During the meeting the African Regional Strategic Plan for Immunisation 2014-2020 was presented and discussed. This Strategic Plan will provide policy and programmatic guidance to Member States. It addresses the challenges that countries and their partners need to overcome to provide universal access to immunisation for all eligible populations. Other discussions focused on updates on routine immunisation and new vaccines introduction, accelerated immunisation initiatives, and polio eradication.

During the second day the financial reports were presented, as well as specific country coordination activities, including implications of the Ebola outbreak on immunisation programmes, and security constraints in Nigeria. The 2015 Plan of Action from WHO/IVE was presented and discussed in detailed.
All immunisation partners pledged their continued support to further strengthen the immunisation systems and ensure universal access to vaccines and immunisation services in the African region. NESI made a commitment to support the EPI capacity building activities in the African region.

The invitation extended to NESI to participate in this meeting, validates the position of NESI as integral partner in capacity building in the African Region. Attending the meeting was also an opportunity to discuss and brainstorm on potential future activities with other immunisation partners.

3.1.2. Strategic Advisory Group of Experts meeting, Geneva, Switzerland, April and October 2015

The Strategic Advisory Group of Experts (SAGE) meetings were organised by WHO from 14 to 16 April 2015, and from 20 to 22 October 2015, in Geneva, Switzerland. SAGE advises WHO on overall global policies and strategies, ranging from vaccine research and development, to delivery of immunisation services and linking immunisation with other health interventions. SAGE usually meets twice a year and reports directly to the Director-General of WHO.

The first session of the respective SAGE meetings covered the reports from WHO/IVB and Gavi, followed by reports from other advisory committees. Major topics discussed during this years’ SAGE meetings were Ebola vaccines and Malaria vaccine. It was for the first time during the SAGE meeting in October 2015, that reports from international immunisation partners were presented. Other topics addressed by SAGE during 2015 are summarised in the table.

SAGE is an excellent opportunity for NESI to network but also for understanding the rationale supporting WHO’s recommendations on vaccines and immunisation. These evidence-based arguments can immediately be included in NESI’s education and training activities enriching discussions with the most up-to-date information, especially relevant for vaccinology courses and immunisation management courses.
Topics addressed by the Strategic Advisory Group of Experts during 2015

<table>
<thead>
<tr>
<th>Topics discussed at SAGE April 2015</th>
<th>Topics discussed at SAGE October 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report from WHO/IVB</td>
<td>Report from WHO/IVB</td>
</tr>
<tr>
<td>Report from Gavi</td>
<td>Report from Gavi</td>
</tr>
</tbody>
</table>
| Report from other Advisory Committees on Immunisation:  
  • Global Advisory Committee on Vaccine Safety  
  • Product Development for Vaccines Advisory Committee | Reports from other Advisory Committees on Immunisation:  
  • Global Advisory Committee on Vaccine Safety  
  • Immunisation Practices Advisory Committee  
  • Immunisation and vaccines related implementation research advisory committee  
  • Product Development for Vaccines Advisory Committee  
  • Expert Committee on Biological Standardisation |
| Global Polio Eradication Initiative | Ebola vaccines                       |
| Administration of multiple injectable vaccines | Global Polio Eradication Initiative |
| Reducing pain and distress at the time of vaccination | Measles and rubella vaccines |
| Sustainable access to vaccines in Middle-Income countries: a shared strategy | Malaria vaccine |
| Ebola vaccine and vaccination        | Global Vaccine Action Plan: progress report |
| Maternal vaccination                 | Report on activities from international immunisation partners |
| Pertussis vaccination schedules      |                                       |

3.1.3. Global Immunisation Meeting: Protect, Innovate, Accelerate, Sitges, Spain, June 2015

The Global Immunisation Meeting: Protect, Innovate, Accelerate was organised by WHO and UNICEF in Sitges, Spain, from 23 to 25 June 2015. Meeting participants included Ministry of Health representatives of 26 countries, representatives of WHO, UNICEF, academia, partner agencies, civil society organisations and industry.

The format of the meeting comprised of plenary and parallel interactive workshop sessions.
During this meeting key issues related to strengthening routine immunisation, introduction of new vaccines, needs in capacity building, accelerated disease control among other topics were discussed with all partners at the global, regional and country level. The meeting reported that achievements have been made in introducing new vaccines and establishing and strengthening NITAGs. However, five of the six GVAP targets for 2015 are not on track: DTP3 coverage targets; poliovirus transmission interruption; maternal and neonatal tetanus global elimination by 2015; measles elimination from three more WHO regions by end-2015; and rubella elimination from one more WHO region by end-2015. Only the GVAP target of new and under-utilised vaccine introduction is on track.

All countries and organisations committed to GVAP were encouraged to evaluate their contributions and make improvements to achieve results. New tools and strategies, renewed global commitment and strong country ownership will be critical to get back on track. It is now key to attaining and sustaining polio eradication; measles and rubella elimination; and maternal and neonatal tetanus elimination.

Attending this meeting was a good opportunity for NESI to meet key partners and to receive updates on the newest developments on vaccines and immunisation.

The Task Force on Immunisation (TFI) was organised by WHO/AFRO in Addis-Ababa, Ethiopia, from 30 June to 1 July 2015.

The Task Force on Immunisation serves as the principal advisory group to WHO/AFRO for development of policies related to vaccines and immunisation. The mandate of TFI is to provide strategic advice, and is not restricted to childhood vaccines and immunisation but covers the control of all vaccine-preventable diseases in the context of health systems strengthening.

The objectives of the TFI meeting included:

- Review the recommendations from SAGE April 2015 and their implications for the African Region;
- Analyse progress made in Polio Eradication Initiative in the African Region;
- Discuss revitalisation of immunisation systems in the Ebola affected countries (Guinea, Liberia and Sierra Leone);
- Assess status of GVAP implementation in the African Region;
- Review progress in measles/rubella control.

The Task Force on Immunisation was attended by the TFI members, SAGE and ARCC members, chairs of Technical Advisory Groups, and representatives of the following organisations: WHO, UNICEF, USAID, CDC, Gavi, AMP, NESI, JSI, Rotary Foundation. It was a great honour for NESI to be invited by WHO/AFRO to this high-level meeting.

3.2. Symposia

3.2.1. 30th International Papillomavirus Conference, Lisbon, Portugal, September 2015

The 30th International Papillomavirus Conference was organised in Lisbon, Portugal, from 17 to 21 September 2015, by the International Papillomavirus Society and the Portuguese Papillomavirus Society.

The conference brought together more than 2000 researchers, clinicians, policy-makers and other healthcare professionals aiming at exchanging the latest advances in science and practice.

Some of the conference highlights included: epidemiology of HPV; molecular biology; immunology and pathogenesis of HPV; HPV vaccines; prevention of cervical cancer and other papillomavirus associated diseases. The conference format consisted of state-of-the-art sessions, keynote lectures, roundtable discussions, workshops and sessions including oral and poster presentations.
SAVIC/SMU, SA-MRC and NESI/University of Antwerp presented two posters in the session on Public Health/Epidemiology - Vaccination. Participating in this conference was also an opportunity to meet experts in the different fields of HPV research and to develop new collaborations.

**Poster presentations:**

Dochez C, Burnett RJ, Mphahlele MJ. HPV vaccination in the African Region: opportunities for strengthening overall adolescent health.

Burnett RJ, Dochez C, Mphahlele MJ. Ethical considerations regarding the human papillomavirus vaccination programme in South Africa.
A new Erasmus Mundus Joint Master’s Degree entitled “Leading International Vaccinology Education” (LIVE) was granted by the Erasmus+ Programme of the European Union and is scheduled to start in September 2016.

LIVE is a two years Master’s programme between five European universities: Université Claude Bernard Lyon 1, France (coordinating university); Universitat Autònoma de Barcelona, Spain; Universitat de Barcelona, Spain; University of Antwerp, Belgium; Université Jean Monnet Saint-Etienne, France. In addition, the programme is supported by a worldwide network of 31 international associated partners and 16 supporting partners. NESI is supporting partner to the LIVE programme.

The general objective of this new LIVE programme is to train the next generation vaccinologists who will have to manage an increasing number of infectious and non-infectious vaccine targets. The LIVE programme will focus on three main pillars: (1) in-depth exposure of trainees to the multi-disciplinary aspects of vaccinology, (2) academic preparation in basic and clinical sciences, (3) vaccinology training undertaken in both public sector and industry settings.

The two-year programme is divided in four semesters. The students will be attending each semester at different universities: during the first semester the courses will focus on immunology and immunopathology and will be taking place in Spain; during the second semester students will specialise in infectiology in Belgium and research and clinical vaccinology will be the focus during the third semester in France. After completion of the course work, the LIVE students will be conducting their Master thesis during the fourth semester at partner universities/organisations/companies around the world.

The LIVE programme was launched during the “VaxInEu Symposium on Vaccinology and Infectiology” that was held in Barcelona, Spain, from 30 September to 2 October 2015. This international symposium fosters exchanges between all vaccinology actors, including students, and is an excellent networking opportunity. The annual VaxInEu symposium will be alternatingly organised in the different countries of the LIVE programme. NESI attended the symposium as a supporting partner of the LIVE programme.

More information on the LIVE Master’s programme and application procedures can be found on http://live.univ-lyon1.fr/
NESI is a partnership between the University of Antwerp and the public and private sector. The Executive Secretariat based at the University of Antwerp coordinates and implements activities for the Network. The Executive Secretariat reports to the Oversight Committee (OC), which advises on strategy and budget allocation, and reviews outcomes. The Oversight Committee is composed of representatives from this partnership, representatives from partner universities and international health organisations and alliances, and international vaccinology experts.

Specifically, the committee:

- shapes a strategic vision and direction for NESI;
- advises on the strategy to follow and defines priorities;
- stimulates/fosters participation of Gavi partners and others in the implementation of NESI activities;
- reviews the plans, evaluates the postulated goals and endorses the work plan and the related budget allocation;
- facilitates networking and collaboration with other bilateral and multilateral stakeholders engaged in the area of capacity building for immunisation programmes;
- ensures the academic freedom of NESI in planning and implementing its activities;
- verifies the independency of the activities organised by NESI in relation to its sponsors.

The 11th NESI Oversight Committee Meeting was organised in Pretoria, South Africa, on 23 March 2015.

The Executive Secretariat reported to the Oversight Committee on the implementation of the Plan of Action and the financial report for the year 2014. After the discussion of the reports, the secretariat presented the work plan for 2015. A special session was devoted to the future of NESI and possible funding opportunities. Professor Anwar Hoosen kindly agreed to step in as interim chair for the 11th Oversight Committee Meeting, while a new chair was elected during this meeting. Professor Fredrick Were was unanimously elected as the new NESI OC chair.

Based on the discussions of the report for the year 2014 and the work plan for the year 2015, the members of the committee formulated recommendations and approved the NESI work plan and the related budget allocation for the year 2015.
Members of the NESI Oversight Committee 2015

<table>
<thead>
<tr>
<th>Core Members</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof Anwar Hoosen</td>
<td>Head of Department of Medical Microbiology and Virology, University of the Free State, South Africa</td>
</tr>
<tr>
<td>Interim Chair</td>
<td></td>
</tr>
<tr>
<td>Prof Mohammed Bouskraoui</td>
<td>Professor and Dean of the Faculty of Medicine, University of Cadi Ayyad, Morocco</td>
</tr>
<tr>
<td>Prof Tandakha Dieye</td>
<td>Head Immunology Unit, Le Dantec University Teaching Hospital, University Cheikh Anta Diop, Senegal</td>
</tr>
<tr>
<td>Dr Carine Dochez</td>
<td>Director NESI, Department of Epidemiology and Social Medicine, University of Antwerp, Belgium</td>
</tr>
<tr>
<td>Prof Cissy Kartasasmita</td>
<td>Professor, Department of Child Health, Faculty of Medicine, Universitas Padjadjaran, Indonesia</td>
</tr>
<tr>
<td>Prof Najwa Khuri-Bulos</td>
<td>Professor and Director, Infectious Disease and Vaccine Center, University of Jordan, Jordan</td>
</tr>
<tr>
<td>Dr Heidi Larson</td>
<td>Senior Lecturer, London School of Hygiene and Tropical Medicine, UK</td>
</tr>
<tr>
<td>Prof André Meheus</td>
<td>Senior advisor NESI, Department of Epidemiology and Social Medicine, University of Antwerp, Belgium</td>
</tr>
<tr>
<td>Prof Jeffrey Mphahlele</td>
<td>Vice President of Research: South African Medical Research Council, Head of SAVIC; Professor and Co-Director: SA-MRC/Diarrhoeal Pathogens Research Unit, Sefako Makgatho Health Sciences University, South Africa</td>
</tr>
<tr>
<td>Prof Fredrick Were</td>
<td>Dean and Professor of Paediatrics, Department of Paediatrics and Child Health, University of Nairobi, Kenya</td>
</tr>
<tr>
<td>Prof Joost Weyler</td>
<td>Professor and Head of Department of Epidemiology and Social Medicine, University of Antwerp, Belgium</td>
</tr>
<tr>
<td>Non-Core Members</td>
<td>Affiliation</td>
</tr>
<tr>
<td>--------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Dr Karin Hardt</td>
<td>Director, Worldwide Vaccinology, Vaccine Education and Medical Training, GlaxoSmithKline, Belgium</td>
</tr>
<tr>
<td>Dr Raj Kumar</td>
<td>Senior Programme Officer, Gavi, Switzerland</td>
</tr>
<tr>
<td>Dr François Meurice</td>
<td>Ambassador Vaccines, Scientific Affairs, Public Health &amp; Medical Education, Global Medical Affairs, GlaxoSmithKline, Belgium</td>
</tr>
<tr>
<td>Dr Afisah Zakariah</td>
<td>Director, Policy, Planning, Monitoring and Evaluation Directorate, Ministry of Health, Ghana</td>
</tr>
<tr>
<td>Secretariat</td>
<td>Affiliation</td>
</tr>
<tr>
<td>Mrs Katrin Verboven</td>
<td>Administrative and Finance Project Coordinator NESI, Department of Epidemiology and Social Medicine, University of Antwerp, Belgium</td>
</tr>
</tbody>
</table>
Network for Education and Support in Immunisation
Department of Epidemiology and Social Medicine

University of Antwerp
Campus Drie Eiken
Building R, 2nd Floor
Universiteitsplein 1
BE-2610 Antwerp
Belgium

Telephone +32 (0)3 265 25 15
Telephone +32 (0)3 265 28 91
Facsimile +32 (0)3 265 28 75
E-mail nesi@uantwerpen.be
Website www.nesi.be

Design
Commotie
Communicatie met toekomst
www.commotie.be