

**Poster055****Bringing health promotion and education to schools – impact and evaluation of the healthy generation project****Emilia PAULINO, Sara TORRALBA, Teresa COUTO, Diana COSTA****Background**

Geração Saudável (Healthy Generation) is a public health promotion and health education project led by the Portuguese Pharmaceutical Society, targeted to school age children.

**Purpose**

Evaluate the project's general impact, through direct assessment of students' knowledge on the addressed topics and the number of students and schools covered.

**Methods**

The Project promoted training on diabetes, responsible use of medicines and drug abuse to children with an average age of 11.61 old. Trainings were held in an especially adapted bus, addressing also the promotion of the pharmacists' role in society.

(1) To evaluate the training, students were randomly selected to answer a questionnaire on the topics covered, composed of 9 multiple choice questions, with only one correct answer out of four. By the end of the school year, a descriptive analysis was conducted to characterise the different variables, according to the main variable: with/without training.

(2) The number of schools and students' covered was also analysed, by comparison with the previous school year.

**Results**

1136 students participated, from which 52.4% (n=594) had already received training. The average number of correct answers was higher in the group that had already received training (7.73 in 9) in comparison to the other group (5.25 in 9). By the end of the school year 2016/2017, the Project had visited 68 schools, covering 12,183 students (+523 [4.49%] when compared with 2014/2015) and 648 teachers (+34 [5.54%]).

**Conclusions**

Training sessions had a positive impact on students' answers, who showed a better knowledge on the topics. In addition, comparing with the school year 2014/2015, the number of schools, students and teachers increased significantly.

**Poster056****Needs of advanced and specialist practice from Indonesian pharmacists' perspectives: an implementation of FIP Workforce Development goal number 4****Sherly MEILIANI, Ian BATES****Background**

Many countries are developing a focus on the advancement of pharmacy practice in order to provide impactful services to face worldwide health challenges. Taking care of more complex diseases resulting from ageing population is one of major challenges for Indonesia's health system. Pharmacists as medicines

expert need to have skills which are more advanced to deal with more complex medicines to provide better care and improve society's health.

**Purpose**

This study aims to explore pharmacists' perceptions related to the need of advanced practice development in Indonesia.

**Methods**

This study was conducted by interviewing 43 practising pharmacists from September to October 2017. A mixed method of data collection including focus group discussions and one-to-one interview was conducted based on the availability of participants. The interviews were transcribed and analysed thematically using the pre-coding frame which was then revised and expanded to include new codes emerging from data.

**Results**

An increase of medicines complexity in patients was the reason why pharmacists need to be advanced. From the pharmacists' perspectives, the need for a clearer developmental career pathway was emphasised by those having less than 5 years' experience and working in patient care settings. As the pharmacists become more advanced, they can be an equivalent collaborative partner and a reliable source of medicines expertise within healthcare teams. Pharmacists across the country perceived that defined advanced practice would have positive impact on the society and National Health Service delivery; therefore, developing advanced practice was aligned with the aim of the professional body and the regulator in Indonesia.

**Conclusions**

This study shows there was a need to develop advanced practice from Indonesian pharmacists' perspectives. Further research on defining criteria for advanced practice would be the next step. These criteria which show clear career pathway can be used as a tool for subsequent professional recognition as markers for practice advancement.

**Poster057****A qualitative study of Indonesian pharmacist perception on their challenges of practice: Mapping to the Pharmaceutical Workforce Development Goals****Sherly MEILIANI, Ian BATES****Background**

Recently, pharmacists face many challenges due to an increase in ageing population. Little is known of pharmacist's perception of difficulties that they encounter in the workplace specifically in Indonesia. This study aims to explore opinions of pharmacists regarding challenges that they face in the workplace in the context of professional development.

**Purpose**

This study is part of a bigger project on developing advanced practice in Indonesia. A semi-structured interview of purposively sampled 24 Indonesian pharmacists was conducted from September to October 2017. The interviews were transcribed and analysed iteratively using a pre-coding frame which was obtained from the 13 Pharmaceutical Workforce Development Goals (PWDGs) established by the FIP. The cluster of PWDGs sets as a theme and the goals sets as sub-theme.

**Methods**

The professional development cluster was the most frequent cluster mapped. Pharmacists with less than 3 years experiences, and working in patient care setting, expressed a need for competency development in their workplace. Hospital and community pharmacists perceived that crossover between sector and "working with others" were barriers in providing services. Academy cluster: most pharmacists who practice in community setting or university stated that interprofessional education in university and early foundation training is essential to prepare pharmacists for the workplace. System cluster: workforce impact has not been recognized in Indonesia, there are a limited number of pharmacists in patient care setting and need for better regulation enforcement. Three new themes emerged: challenges to pharmacists themselves, in pharmacy organizations and in conducting evidenced-based research. Minimum initiative of pharmacists became barriers to developing the profession. Optimization of pharmacy organization role and evidence-based research to support regulation are important for pharmacists to support their career.

**Conclusions**

This study shows that establishment of career pathway and unpreparedness of pharmacists after graduate challenge Indonesian pharmacist the most. Further research on actions to deal with these challenges needs to be done.

**Poster059**

### **An overview of systematic reviews of economic evaluations of pharmacy-based public health interventions: addressing methodological challenges**

**Suzete COSTA, João PEREIRA, Dennis K. HELLING, Céu MATEUS**

**Background**

The economic evaluation of pharmacy services requires certain considerations which differ from the evaluation of medicines. Some do not seem to be exclusive to pharmacy, they exist in public health interventions. It may also be useful to explore recommendations for conducting economic evaluations alongside trials.

**Purpose**

To perform an overview of systematic reviews of economic evaluations of pharmacy services and triangulate results with recommendations for economic evaluations of both public health interventions and alongside trials to assist in improving research methods.

**Methods**

1) Exploratory review of recommendations on the economic evaluation of public health interventions; 2) Exploratory review of recommendations for conducting economic evaluations alongside clinical or pragmatic trials; 3) Overview of systematic reviews of economic evaluations of pharmacy interventions (protocol registered, reference no. PROSPERO 2016: CRD42016032768 ([http://www.crd.york.ac.uk/PROSPERO/display\\_record.asp?ID=CRD42016032768](http://www.crd.york.ac.uk/PROSPERO/display_record.asp?ID=CRD42016032768))).

**Results**

Fourteen systematic reviews were included containing 118 publications corresponding to 75 index publications. Only two reviews addressed economic evaluation in community pharmacy

exclusively. Reviews reported favorable economic findings for 71% studies with full economic evaluations or CCA or CMA. Types of economic analysis are diverse. The two critical quality domains of AMSTAR-2 absent from most reviews are 1) protocol prior to review and 2) list of excluded studies. Key methodological findings include: certain types of risk of biases; study designs not restricted to RCTs; most economic quality criteria met but some issues unresolved or unclear: population, comparator, costs, analytical methods, incremental costs and outcomes, uncertainty, heterogeneity, equity, process and external validity. Triangulation revealed additional gaps.

**Conclusions**

A methodological approach for economic evaluation of pharmacy-based public health interventions was proposed. These findings may assist in improving the design of pilot trials of economic evaluations in pharmacy, as well as providing evidence for payers.

**Poster061**

### **Pharmacist prescribing and care improves cardiovascular risk, but what do patients think? A sub-study of the Rx EACH study**

**Yazid N. AL HAMARNEH, Sarah LAMB, Maoliosa DONALD, Brenda HEMMELGARN, Kathryn KING-SHIER, Charlotte JONES, Cliff MITCHELL, Ross T. TSUYUKI**

**Background**

The Alberta Vascular Risk Reduction Community Pharmacy Project: Rx EACH, was a randomized trial which demonstrated that a community pharmacy-based case finding and intervention program (including prescribing, laboratory testing, and follow-up) reduced the risk for cardiovascular (CV) events by 21% when compared to usual care.

**Purpose**

To evaluate patient perceptions regarding pharmacist prescribing and care in patients at high risk for CV events.

**Methods**

All participants who took part in Rx EACH received an invitation letter. Those who took part in the interviews provided verbal consent. Participants were asked to provide their opinions about:

- The care they received from pharmacists
- Communication between patients, pharmacists and family physicians
- Suggestions for sustainability

Interviews were recorded and transcribed verbatim. Three reviewers (including one patient who did not participate in Rx EACH) analyzed and coded the data independently.

**Results**

Data saturation was achieved after interviewing 14 participants. Half of whom were male and approximately two-thirds were older than 60. The following themes were identified:

(i) Patient-pharmacist relationship: Participants highlighted the importance of having a strong relationship with the pharmacist, indicating that could enhance their level of comfort with the pharmacist. They also felt that pharmacists truly cared about them as people.