

Dennis CL, and Faux S. Development and psychometric testing of the Breastfeeding Self-Efficacy Scale. *Research in Nursing and Health* 1999;22 p: 399-409.

Casal CS, Lei A, Young SL, & Tuthill EL. A Critical Review of Instruments Measuring Breastfeeding Attitudes, Knowledge, and Social Support. *Journal of Human Lactation* 2016;doi:0890334416677029.

### P13

#### Ageing immunosenescence and vaccine efficacy

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#### Background

The age- dependent decrease in immunological competence results in greater susceptibility to infection and reduced responses to vaccination. The present study aims to increase the understanding of immunosenescence and investigate strategies to overcome vaccine ineffectiveness.

#### Materials and Methods

Literature review in PubMed, Cinahl and Google Scholar was conducted between February and March 2018 with the following keywords: immunosenescence, vaccination, elderly and efficacy. English written reports published in or after 2010 that examined the impact of age related immune deficiency and vaccine failure were included.

#### Results

Age related immunological alterations include reduction in natural killer T- cell and B- cell cytotoxicity and disturbances in macrophage-derived cytokine release. Thymic atrophy, reduced output of anergic memory cells, deficiencies in the cytokine production, uncertain antigen presentation and coinfection with persistent viruses results in further declination of the cellular immunity among older adults. New formulations such as booster vaccinations, different immunization routes, high dose vaccines and the use of adjuvants are approaches that are under investigation and may improve the efficacy and effectiveness of immunization.

#### Conclusions

Understanding mechanisms of immunological aging and designing more effective vaccines may strengthen infectious diseases prevention among older adults. This study has a great relevance for public health nursing science across the Europe.

#### References

- Boraschi D, Italiani P. Immunosenescence and vaccine failure in the elderly: Strategies for improving response. *Immunology Letters*. 2014;162(1):346-353.
- Fuentes E, Fuentes M, Alarcon M, Palomo I. Immune System Dysfunction in the Elderly. *An Acad Bras Cienc*. 2017;89(1):285-299.
- Loukov D, Naidoo A, Bowdish D. Immunosenescence: implications for vaccination programs in the elderly. *Vaccine: Development and Therapy*. 2015;5:17-29.

### P14

#### Results of Data Collection from the Limoxis System for the Control and Management System of Hospital Acquired Infections

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#### Background

Limoxis can be utilized in the Hospital Units as a useful tool to collect all necessary data for Hospital Acquired Infections. Participants were 10 Hospital Units of the 6th Health District and 1 Public Hospital Unit of Attica.

#### Materials and Methods

A total of 1330 cases of notifiable-disease and bacteraemia reporting forms from period 2010-2016 of 10 Hospital Units of the 6th Health District and Public Hospital Unit of Attica were digitized for epidemiological study and applied to the newly-developed information system.

#### Results

The total of 42.3% of all patients suffered from Hospital Acquired Infections caused by pathogen *Acinetobacter* and 38.8% from pathogen *Klebsiella*. Depending on the categories of HAIs, bloodstream ones prevail against pneumonia (34.4%) and urinary track ones (22.3%). Depending on the types of bacteraemia, primary bacteraemia prevails with 61.5%. Most patients have had a hospital stay of more than 28 days.

#### Conclusions

The Limoxis Information System enables data entry and electronic storage, which takes less time than printed forms and also allows fast access to stored data. Finally, there are important options such as statistical analysis, provides the antibiotics under surveillance, provides also a reliable estimate of antibiotic consumption and the geographical mapping of data useful for Healthcare Professionals and Hospital Administration.

### P15

#### Cultural Adaptation in Greek language and Validation of the instrument «Bullying in Nursing Education Questionnaire (BNEQ)» to university nursing students

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#### Background

Bullying is a phenomenon that observed in nursing students and related to negative effects on physical and mental health. The aim of the study was validation and cultural adaptation of the questionnaire "Bullying in Nursing Education Questionnaire (BNEQ)" in Greek university Students of Nursing.

#### Materials and Methods

A pilot correlational study was performed in a sample of 25 nursing students. The BNEQ was translated from English into Greek, and backward, and its cultural adaptation took place. Cronbach's and test-retest reliability (Wilcoxon, Spearman) and x2 test were applied at statistical significance  $\alpha = 0.05$ .

#### Results

The Cronbach alpha coefficient was equal to 0.96. All questions were significantly correlated ( $p < 0.05$ ), with the exception of the questions "Yelling or shouting in rage to you from ....", "Inappropriate, nasty, rude or hostile behavior to you from ...", "Spreading of malicious rumors or gossip to you from ...", "Cursing or swearing to you from...", "Negative or disparaging remarks about becoming a nurse..." and "Being ignored or physically isolated...". The Wilcoxon test showed that there was no statistically significant difference ( $p > 0.05$ ), with the exception of the questions "Yelling or shouting in rage to you from ....", "Inappropriate, nasty, rude or hostile behavior to you

from ...", and "Negative or disparaging remarks about becoming a nurse...".

#### Conclusions

The pilot data support the reliability and validity of the BNEQ scale

#### P16

##### Development and feasibility of a psychoeducational intervention to promote adolescents' mental health literacy in a school context

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#### Background

Mental Health Literacy was defined as knowledge and beliefs about mental disorders that aid in its recognition, management or prevention. Portugal is the European country with the highest prevalence of mental illness (22.9%) and anxiety disorders are the most common (16.5%). Portugal School Health Program 2015 evidences the promotion of health literacy and anxiety as areas of intervention in adolescence. The aim was to identify evidence about adolescents' anxiety mental health literacy in school context; Design a psychoeducational intervention; Validate the content of that intervention; Evaluate its feasibility.

#### Materials and Methods

Medical Research Council framework for development and evaluation of complex interventions using mixed methods throughout development and feasibility stages: 1) systematic reviews; 2) health/education professionals' and adolescents' focus group; 3) experts' e-Delphi; 4) feasibility study; 5) pilot study.

#### Results

The psychoeducational intervention has different methods and pedagogical techniques, consists of 4 sessions of 90 minutes each. We observed clinically and statistically significant impact.

#### Conclusions

This psychoeducational intervention increased adolescents' anxiety mental health literacy and allow them to access, understand and use information on prevention, recognition and management of anxiety. This study has a high relevance for nursing science in Portugal and Europe. Trial Registration: ClinicalTrials.gov ID: NCT03872817.

#### P17

##### Mapping antenatal care policy for low-risk pregnant women in Portugal and comparable countries: A scoping review

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#### Background

It is recognised that in high-income countries more can be done so that women can experience a safe and positive pregnancy. Midwives were identified as the key practitioners to provide this when compared to other models of care<sup>1</sup>. In Portugal antenatal care of low-risk healthy pregnant women is provided by family-doctors despite having available nurse-midwives who are specially trained to maintain "normality"<sup>2</sup>. The aim of the study was to map antenatal care policy in high income countries comparable to Portugal, with the ultimate goal of informing future policy and identify the viability of the adoption of a midwifery-led-care model to the Portuguese context.

#### Materials and Methods

A search was conducted in MEDLINE, CINAHL, Academic Search Complete, Web of Science and Scopus. A hand search of grey literature whose policies were not available key persons were contacted. Search results were exported and data extracted using charting forms. Data will be synthesised using narrative description.

#### Results

The authors are still working on the data but preliminary results show a wide variability in nature, content and range of the policies

#### References

Sandall, J., Soltani, H., Gates, S., Shennan, A., & Devane, D. (2016). Midwife-led continuity models versus other models of care for childbearing women. *Cochrane Database Syst Rev*, 4(9), Cd004667. <https://doi.org/10.1002/14651858.CD004667.pub5>

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