

Poster Presentations

Poster001

The advanced pharmacy practice experience at the University of Oslo

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Background

The Advanced pharmacy practice experience (APPE) in European countries is to a certain extent directed by the EU directive requirement of pharmacy students having a 6 months training in a community or hospital pharmacy. However, a wide variety has been found in how the APPE is structured. Looking outside of the EU, the variation becomes even larger, in terms of duration and placement of the training. FIP has emerged around the assumption that pharmacists worldwide have a certain basis in common. Therefore, a description of the organization of APPE in one country can be a good basis for discussion APPE in general.

Purpose

To describe the APPE at the University of Oslo (UiO) and planned changes to the structure and contents in the next 2 years.

Methods

The contents of the current and future APPE are described based on the course handbook "Pharmaceutical Apprenticeship", the course descriptions for the existing (FRM4000) and future (FARM3130) course, material in the course's web-based learning platform and planned changes to the evaluation form.

Results

At UiO, the APPE is in the 7th semester of the Master program in pharmacy and consists of approximately 21 Weeks in a community or hospital pharmacy, with periods of instruction at the University. Each student submits a mandatory folder consisting of tasks and essays in topics such as prescription evaluation, communication and ethics. Examination consists of a 1 hour multiple-choice, and a 15 minutes oral presentation of prescriptions and other problem-solving tasks.

Conclusions

The APPE at UiO is mainly a training period, with evaluation of written tasks. Planned changes include a move to the 6th semester, revision of the course contents and changing the examination form.

Poster003

Daratumumab: multiple myeloma outcomes

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Background

Multiple myeloma (MM) is an incurable malignancy of plasma cell that accounts for 10% of haematological diseases. In Portugal, the incidence is estimated in 514 cases per year. In 2016 daratumumab was approved in EU in monotherapy. Later, it was also investigated the combination of daratumumab with bortezomib or lenalidomide. The addition of daratumumab to bortezomib or lenalidomide demonstrated a significant reduction in the risk of disease progression or death in patients who have at least received one prior therapy.

Purpose

This study aims to contribute with real-world data on daratumumab treatment outcomes, which are scarce.

Methods

Retrospective cohort chart review study over a 19-month period (July 2016 to January 2018).

Results

Thirteen patients with MM were enrolled with a median age of 71 years (range 60-79) and most of them men (53.8%). The prevalent type of MM was IgG (69.2%) and IgA (15.4%). Standard cytogenetic risk was observed in 76.9% of the patients and high risk in 23.1%. The median previous treatment lines were 2 (range 1-4), including Bortezomib (92.3%) and lenalidomide (84.6%). Five patients were treated with daratumumab in monotherapy (38.5%), five (38.5%) daratumumab + lenalidomide and 3 (23.1%) daratumumab + bortezomib. Four (80%) of five patients that were treated with daratumumab in monotherapy have deceased with a median of 50.5 survival days (range 30-102). By the end of the study all patients in combined therapy were alive as well the one that was in monotherapy. Across all groups the most common adverse events of grade ≥ 3 were: peripheral neuropathy (61.5%), anaemia (46.2%) and equally rhinorrhoea, productive cough and peripheral oedema (38.5%).

Conclusions

Our study indicates that there is improved patient's survival treated with the combination therapy as demonstrated in the POLLUX and CASTOR trials. The safety profile is comparable to those of mentioned studies.

Poster004

Evaluation of oral production accuracy of Portuguese brand names of medicines

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Background

Incorrect productions of medicine names may cause medication errors. Studies evaluating oral productions of Portuguese brand names are scarce, although medicine agencies recommend that medicine names are pronounceable.

Purpose

To evaluate the influence of the phonological and orthographic structure.

Methods

Participants: 37 customers of pharmacies (older/less educated: 58.7 \pm 12.8 years-old; 7.5 \pm 3.2 years of schooling) and 30 students from a humanities faculty (younger/more educated: 25.9 \pm 9.3 years-old; 14 \pm 1 years of schooling) in the Lisbon area, 2014/15. Students were asked to read aloud 12 names (repeated 3 times). Pharmacy customers read the 12 names only once, for time limitations. Names were classified in three groups: 1) names with "y", "k", or "w", letters not belonging to Portuguese native vocabulary (e.g. Propycil®), 2) names not written according to the Portuguese orthographic rules (e.g. Qutenza®), and 3) names complying with Portuguese orthography (e.g. Claratine®). Names were sequentially presented in a screen and audio recorded. A

trained linguist transcribed/coded 1495 outputs. Only adults capable of performing the task were enrolled. Non-parametric Chi-square ($p < 0.05$) was applied.

Results

Overall, less educated have produced significantly more errors than more educated ones ($X^2 = 92.875$, $p < 0.001$); 31% vs. 14.4% incorrect productions. Percentage of correct productions in canonical vs. names with letters "y", "k", or "w" vs. non-canonical names: more educated (90.3% vs. 82.6% vs. 75.3%), and less educated participants (64.6% vs. 68.5% vs. 44.3%).

Conclusions

Less educated participants performed worst, suggesting that this population might be more vulnerable to medication errors. Brand names not complying with regulations requirements seem to favour production errors. More investigation is needed towards creating linguistic norms to develop/adapt suitable medicine names.

Poster005

Are Portuguese brand names of medicines readable?

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Background

Misunderstandings involving medicine names may cause serious medication problems. According to regulations, medicines names must be readable and pronounceable. However, investigation on readability of medicines names is limited.

Purpose

To quantify and characterize phonological errors in a reading task of Portuguese medicines brand names.

Methods

Undergraduates from a Portuguese faculty were conveniently selected from non-biomedical courses to minimize prior knowledge on names investigated (2014). Overall, 12 names were tested repeated 3 times. Thirty participants, above age 18 and able to perform the task, read aloud names successively displayed on a screen. Productions were audiorecorded. 1081 names were produced and phonetically transcribed by a trained phonetician, who also identified and coded the errors as: substitutions - a segment is replaced by another (clarotine for claritine®); insertion - a segment is added (claritines for claritine®); metathesis - segments interchange positions (cliratine for claritine®); deletion - a segment is deleted (claritin for claritine®); inadequate vowel reduction. Hesitations and/or lengthening were also coded.

Results

Of 1081 names transcribed, 83.3% were fully correct, 10.6% contained errors, 5% were produced with hesitations and/or lengthening, and 1.1% were not analyzed due to audio problems. In the names containing errors ($n=114$), 187 errors were identified: 44.4% had deletion errors, 29.4% had substitution errors, 13.9% had incorrect insertions, 10.7% had metathesis, and 1.6% were produced with incorrect vowel reduction.

Conclusions

Brand names of Portuguese medicines are prone to pronunciation errors even for educated users. Adaptation to Portuguese grapho- and phonotactics might be needed, as recommended in national

and international regulations. More studies are necessary to investigate the potential impact of the different types of errors in medication errors, and error type in other social groups (e.g. older, less educated subjects; health professionals).

Poster006

Conceptual approaches to the sustainability of healthcare services and their application to pharmacy

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Background

Implementation research aims to develop methodologies to incorporate evidence-based innovations into practice. Following implementation, accomplishing sustainability of the innovation is critically essential to ensure the long-term continuity of services. A number of conceptual approaches to the sustainability of evidence-based innovations in healthcare exist. These approaches aim to guide the process, determine factors influencing and form part of the evaluation. However, the sustainability of innovations in pharmacy services is an area yet to be studied. Therefore there is a need for a conceptual framework to underpin the development of sustainable professional pharmacy services.

Purpose

To evaluate the conceptual approaches for the sustainability of innovations in healthcare in order to develop a framework specific for professional pharmacy services.

Methods

A systematic literature search was undertaken in February 2018 in PubMed, Scopus and Web of Science to identify conceptual approaches/theoretical frameworks for the sustainability of healthcare innovations. All the titles and abstracts were screened and potential articles identified. A table was created for data extraction (type and characteristics of conceptual approach, innovation used, setting, target user).

Results

From the 3033 articles screened, 2585 articles were eliminated after title and abstract screening. 448 full-text articles were reviewed providing 68 sustainability conceptual approaches. The proposed framework for pharmacy services includes two major components: the service and the context domains with factors which moderate the sustainability of the pharmacy service (e.g. adaptability, funding, leadership, and training). The context domains include Individuals (e.g. pharmacy staff), Pharmacy, Local setting (e.g. healthcare professional, stakeholder) and System. Continued evaluations of the service components delivery are crucial to prove sustainable service effectiveness.

Conclusions

Monitoring the service progress is essential to identify the factors affecting its sustainability, allowing their adaptation to the change in circumstances. The proposed framework will guide pharmacy practice researchers and practitioners to evaluate the sustainability of professional services previously implemented.