CPC-040 DESIGN AND ASSESSMENT OF AN E-LEARNING COURSE TO TRAIN CLINICAL PHARMACISTS IN VITAMIN K ANTAGONIST (VKA) CONSULTATIONS

doi:10.1136/ejhpharm-2013-000276.497

[1]E Barbier, [2]G Launay-Vacher, [1]MC Chaumais, [1]A Rieutord, [1]R Haddad, [1]C Courtin. *[1]Hôpital Antoine Béclère, Pharmacy, Clamart, France; [2]Européenne de Formation Pour Les Pharmaciens, Engineer, Paris, France*

Background Since 2009, clinical pharmacists have been performing about 150 vitamin K antagonist (VKA) consultations annually in all wards of our hospital. This 24-hour service requires the training of about 15 to 20 pharmacists per year. A very comprehensive but time-consuming training course had been set up.
Purpose To design and implement an E-learning course to train clinical pharmacists for VKA consultations.
Materials and Methods A database of 70 questions (Qs) (35 Level 1 Qs for beginners paired to 35 Level 2 Qs for advanced learners). Each set was divided into 5 themes (biology, side effects, drug interactions, hospital practise and medicines). The training involves six steps (from S1 to S6)

- An assessment of knowledge before training (S1, 10 quizzes level 1)
- Theoretical training using a slideshow (S2)
- 4 role-plays involving a patient and a pharmacist (S3)
- A reassessment of knowledge (S4, 10 quizzes level 2)
- A practical evaluation of running a VKA consultation at the bedside is performed by the pharmacy resident (S5). The score required to complete this step is ≥8 out of 9.
- A satisfaction questionnaire (S6)

The validation method was performed with 10 pre-registration pharmacy students (PRPs).

E learning was developed according to SCORM standards.
Results The individual progression of PRPs was significant (increase of 2.1 points/20, significant $p < 0.025$). A high level of satisfaction and autonomy was expressed when training was completed.

The shift towards e-learning for steps S1 to S4 was much appreciated, particularly distance learning, free access to slideshow, learning flexibility, flash animation for role play. Performances observed for trained consultants at the bedside during S5 were very similar to those obtained prior to E-learning.
Conclusions Anticoagulant monitoring and related patient education is a major issue. Training consultant pharmacists is particularly critical. We demonstrated that E-learning can save much time while providing efficient, customised training to healthcare professionals. Our course will be soon extended to two teaching hospitals belonging to the same group.

In 2013, details of new oral anticoagulants will be added to the course.

No conflict of interest.

CPC-041 DIRECT AVOIDANCE OF MEDICINES COSTS BY PHARMACEUTICAL ANALYSIS OF HOSPITAL PRESCRIPTIONS

doi:10.1136/ejhpharm-2013-000276.498

[1]T Gorce, N Chu, V Duhalde, M Vie, P Cestac, B Bellon. *CHU Toulouse, Pharmacy, Toulouse, France*

Background Computerized Physician Order Entry has been set up in two digestive surgery wards in our University hospital since 2012. Clinical pharmacists analyse hospital prescriptions via this software, in order to promote good use of drugs.
Purpose To estimate avoided medicines costs, in relation to pharmacist interventions, from April to June 2012 in two surgical wards (41 inpatient beds).
Materials and Methods We focused on four types of pharmaceutical recommendations (1-to discontinue a medicine, 2-to start medicines for an untreated condition, 3-to modify a dose regimen, 4-to substitute one medicine for another). Data extracted were: daily dose, price per unit (for drug substitutions we calculated the difference between the prices of the drugs) and average length of stay. We hypothesised that our interventions had a cost impact for half of the inpatient's stay. Cost impact was calculated as follows: (Added or avoided daily dose) X (price per unit) X (half of the average length of stay).
Results 1706 prescriptions were analysed and 340 pharmacist recommendations were accepted by physicians (20%). 238 of these recommendations were among the four types listed above. 155 interventions had an impact on cost: 83% led to a cost reduction (total reduction of Euros 1949) and 17% led to an increased cost (total Euros 571). The 1378 Euros saved represent an economy of 3.6% on the total cost of medicines for these two wards between April and June 2012. Extrapolated to the entire hospital, this saving could add up to Euro 2.5 million each year.
Conclusions Medicines costs can be reduced by pharmaceutical interventions. The financial evaluation of Clinical Pharmacy practise is necessary and further studies are needed to calculate avoidable indirect costs.

No conflict of interest.

CPC-042 DRUG-RELATED PROBLEMS IN A CARDIOLOGY DEPARTMENT – IDENTIFYING TRENDS

doi:10.1136/ejhpharm-2013-000276.499

T Truelshøj, MK Hansen. *Aarhus University Hospital Skejby, Hospital Pharmacy, Aarhus N, Denmark*

Background Since the spring of 2010, periodic medicines reviews have been performed by a clinical pharmacist in four cardiology wards at Aarhus University Hospital, Skejby. Any drug-related problems (DRPs) identified have been detected and classified using the Danish DRP database. In the database, the DRPs identified are categorised and grouped according to ATC code and type of drug-related problem; interaction, adverse effect, dosage etc. Subsequent extraction of various reports can provide useful information about trends in DRPs.
Purpose To analyse the DRPs identified by the pharmacist on the cardiology wards at Aarhus University Hospital, Skejby, over a two-year period. Secondly, the objective is to demonstrate that the Danish DRP database is a useful tool in analysing data.
Materials and Methods Over a two-year period, DRPs identified by the clinical pharmacist were recorded in the DRP database. Data have been analysed using the reports in the DRP database. 846 medicines reviews were included in the analysis.
Results 846 medicines reviews were conducted and a total of 563 DRPs were identified. The most frequent DRPs were associated with dosage (24%). DRPs classified in the categories time/schedule, interactions and supplement to treatment were also very common. Drugs from ATC code C (26%), A (17%) and N (19%) were most often involved in a DRP.
Conclusions The examination of data from medicines reviews of 846 patients has identified trends in DRPs on the cardiology wards. The Danish DRP database proved to be a useful tool in the analysis.

No conflict of interest.

CPC-043 EFFECTIVENESS AND CHANGE OF THE PROTOCOL FOR ANTIRETROVIRAL TREATMENT FOLLOWING EXPOSURE TO HIV

doi:10.1136/ejhpharm-2013-000276.500

M García Queiruga, C Vilaboa Pedrosa, L Martínez López, M Zas García, L Margusino Framiñán, I Martín Herranz. *Complejo Hospitalario Universitario A Coruña, Pharmacy, A Coruña, Spain*