# Other hospital pharmacy topics (including: medical devices)

#### OHP-001 A SURVEY OF PHYSICIANS' OPINIONS ON BIOEQUIVALENT PHARMACEUTICAL PRODUCTS

doi:10.1136/ejhpharm-2013-000276.375

<u>M Ratnaparkhi</u>, R Ghodke, M Patil. *Marathwada Mitra Mandal's College of Pharmacy,* Department of Pharmaceutics, Pune, India

**Background** Bioequivalence studies are basically comparative bioavailability studies designed to establish equivalence between generic and innovator products. Pharmaceutical equivalence is the pre-condition of bioequivalence. Medicinal products are described as pharmaceutically equivalent if they contain the same amount of the same active substances in the same dosage forms that meet the same or comparable standards.

**Purpose** To discover the opinions of physicians on bioequivalent pharmaceutical products and their use.

**Materials and Methods** 130 physicians were given a form with 10 questions. In this survey, questionnaires were answered by face to face interview.

## Results

Q no.	Question	Yes	No	Sometimes	
1	Do you think generic drugs are effective?	49%	36%	15%	
2	Do you prescribe generic drugs?	35%	39%	16%	
3	Do you think generic drug are bioequivalent?	44%	42%	14%	
4	Can you see clinical results in patients who use generic drugs?	52%	25%	23%	
5	Have you ever seen any problems with your patients who use generic drugs?	35%	42%	23%	
6	Do you use generic drugs for yourself or relatives?	31%	64%	5%	
7	Do you trust bioequivalent products?	50%	37%	13%	
8	In your opinion are generic drugs safe to use?	67%	32%	1%	
9	Do you encounter problems with generic drugs? In which	18%	47%	N.R. 35%	
	category?		Antibiotics, analgesics		
10	Generally which categories of generic drugs are more prescribed?	Analgesics, antipyretics, antacids, antibiotics			

**Conclusions** The questionnaire shows that physicians are uncertain about whether generic drugs are as effective as their originals. Furthermore the results revealed that physicians prefer not to use generic drugs for themselves or their relatives. Most of them opined that generics are safe but less effective and therefore they avoid prescribing generic drugs especially antibiotics.

No conflict of interest.

#### OHP-002 ACCESSIBILITY, AVAILABILITY, AFFORDABILITY OF PRESCRIPTION DRUGS, ARETAIEIO UNIVERSITY HOSPITAL, ATHENS GREECE

doi:10.1136/ejhpharm-2013-000276.376

A Kotsiou. Aretaieio University Hospital, Pharmacy, Athens, Greece

**Background** Time is that wherein there is opportunity, and opportunity is that wherein there is no great time. Healing is a matter of time, but it is sometimes also a matter of opportunity (Hippocrates, Precepts Part 1)

Access to medicines, apart for its social dimension as a human right, has also had a great impact on financial issues since ancient time. With the rise in life expectancy the cost of treating many progressive degenerative and chronic diseases is tending towards a tremendous increase as well. New biotechnological methods in drug preparation claim long-term research and high financial investments resulting in very expensive medicines. In response to the social demand for unlimited health budgets it is estimated that medicines expenditure is increasing annually by 5% in western countries. The growing use of generics could be considered a means of controlling the rising cost of healthcare.

**Purpose** To investigate alternative ways to cope with medicines shortages due to the financial crisis. Many pharmaceutical companies are requiring direct payment in order to supply their products. It is imperative to ensure that the patients will really take the drug treatment prescribed by their physicians.

**Materials and Methods** The reduction in the cost of medicines in Aretaieio University Hospital, Athens, Greece, during 2011 by the use of generics was estimated.

Sources used:

- 1. our pharmacy software data regarding medicines use in the hospital wards
- data on prescription modification in cases of shortages, always in cooperation with the medical staff
- data on official lower prices (competition between providers of generics or biosimilars)

**Results** Cost reductions were estimated at between 5–10% for contrast media (Radiology Department), and much more than 50% for antibiotics (Surgical, Obstetrics – Gynaecology, Paediatric Departments).

**Conclusions** Use of generics could be considered a means to control the rising healthcare costs. On the other hand medicines availability in Greece not only in hospitals but also in community pharmacies has become problematic for two main reasons: 1. the policy of reducing the prices of prescription drugs, leading to medicines' shortagse due to exports to other countries and 2. large pharmaceutical companies demanding direct payment, which is impossible under current financial conditions.

#### Abstract OHP-002 Table 1 Medicines cost reduction in Aretaieio University Hospital, Athens, Greece, 2011 (Surgical – Obstetrics, Gynaecology, Paediatric – Radiology Departments)

Medicines	Cost reduction	Comments
Quinolones	52% generic +26% brand (offer) Total: 78%	Brand offers 26% lower price
2nd generation cephalosporins	50%	Brand offers 16% higher price instead of 50% initially
Piperacillin/Tazobactam	22%	New brand offers equal brand –generic price
Omeprazole	31-40%	Depending on the generic chosen
Contrast media	5–12%	Depending on the generic chosen

No conflict of interest.

#### OHP-003 ADHERENCE AND DRUG-RELATED PROBLEMS IN BREAST CANCER PATIENTS ON ORAL ENDOCRINE THERAPY

doi:10.1136/ejhpharm-2013-000276.377

<sup>1</sup><u>P Mazzola</u>, <sup>1</sup>AA Cruz, <sup>1</sup>JM Santos, <sup>1</sup>AT Rodrigues, <sup>2</sup>NMO Silva, <sup>2</sup>AER Silva, <sup>2</sup>RP Carvalho, <sup>3</sup>LC Teixeira. <sup>1</sup>*Faculty of Medical Sciences, Department of Clinical Pathology, Campinas, Brazil;* <sup>2</sup>*Women's Hospital Pr. Dr. José Aristodemo Pinotti, Pharmacy, Campinas, Brazil;* <sup>3</sup>*Faculty of Medical Sciences, Department of Tocogynecology, Campinas, Brazil* 

**Background** The breast cancer mortality rate is high among Brazilian women, a fact probably related to late diagnosis of this condition. Adjuvant endocrine treatment with tamoxifen for 5 years can increase the survival rate of patients with hormone receptor-positive tumours. Because it is an orally administered drug, the patient plays an important role in compliance with the correct treatment (adherence) assuming much of the responsibility for her treatment. Therefore, Pharmaceutical Care has subsidies to influence treatment of these patients, identifying, preventing and resolving drug treatment problems (DTPs). **Purpose** To evaluate adherence to tamoxifen and to identify the most important DTPs in patients with breast cancer on adjuvant endocrine treatment.

**Materials and Methods** A prospective study was conducted in a university hospital specialising in women's health. Over 6 months patients with breast cancer were included if they were on adjuvant endocrine treatment for at least 1 month. All were interviewed by the pharmacist (Minnesota model). The instrument used to evaluate adherence was the Morisky-Green test.

**Results** Forty-one patients were included (mean age 55.0 years; ranging from 34–78). In the first visit, the pharmacist identified 82 DTPs (mean:  $2.0 \pm 1.1$  DTPs/patient), 63.4% related to drug safety. The adherence to oral endocrine treatment was 36.6%; according to the Morisky-Green test; among the non-adherent patients 92.3% were non-intentional (mostly by forgetting to take doses of tamoxifen). The patient's average time on endocrine therapy was 24.9  $\pm$  17.6 months.

**Conclusions** We observed that the DTPs are present in oral endocrine therapy and adherence to this treatment can be considered inappropriate. The results obtained may contribute to the development of strategies in pharmaceutical care to improve adherence to oral endocrine therapy and decrease DTPs in breast cancer patients using tamoxifen.

No conflict of interest.

## OHP-004 ADHERENCE TO ANTIRETROVIRAL TREATMENT

doi:10.1136/ejhpharm-2013-000276.378

<u>F Gutiérrez Nicolás</u>, MM Viña Romero, G Callejon Callejon, P Diaz Ruiz, FJ Merino Alonso. Hospital Ntra. Sra. *de Candelaria, Pharmacy, Santa Cruz de Tenerife, Spain* 

**Background** Knowledge of the patient's adherence to antiretroviral treatment is extremely useful for monitoring HIV infection. However to measure this reliably is not easy. Several methods have been proposed to calculate adherence, each with its advantages and disadvantages.

**Purpose** To compare three of the available methods for assessing medicines adherence. To determine the factors associated with non-adherence to highly active antiretroviral treatment (HAART) in HIV/AIDS patients.

**Materials and Methods** Non-interventional and longitudinal study of patients diagnosed with HIV/AIDS who received HAART (May–June 2010). Three methods for evaluating medicines adherence were studied prospectively: Recording medicines dispensed (RD) from the Pharmacy Department; SMAQ (simplified medicines adherence questionnaire) interview; SMAE (scale for medicines adherence evaluation) interview. We recorded: demographic data (age, sex); years in treatment and daily doses of medicines.

**Results** 85.2% (104) of patients were males and mean age was 46 years (S8.9) with an average treatment time of 8.7 years (S4.6). 79% of patients have had a change in their medicines at some point in the treatment.

The percentage of patients with greater than 95% adherence was: 77.0% (RD), 62.3% (SMAQ) and 79.4% (SMAE).

By all measures of adherence patients with a single dose of medicine daily (SDM) were more adherent than twice-daily medicines (TDM): RD: 84% vs. 70% (p = 0.0781); SMAQ: 70.1% vs. 49.2% (p = 0.0189); ESPA: 85.9% vs. 69.2% (p = 0.0283) respectively. Patients who had been on HAART between 6–10 years had an adherence of 77.1%, while it was 65.8% for those treated 1–5 years and for patients with over 10 years of treatment, it was 40.8% (p = 0.002). Similar results with other measures.

**Conclusions** Since there is currently no ideal method to determine adherence to treatment, it is important to combine several methods depending on patient characteristics to obtain a measure as real as possible. Years with HAART reduces adherence and SDM regimens

schedules appear to have better adherence than TDM regimens. This may affect treatment efficacy positively in the long term.

No conflict of interest.

#### OHP-005 ADVANTAGES AND DISADVANTAGES OF AN ELECTRONIC PRESCRIBING SYSTEM. ASPECTS TO CONSIDER DURING PHARMACIST VALIDATION.

doi:10.1136/ejhpharm-2013-000276.379

<u>B Corcóstegui Santiago</u>, MJ Martinez Bengoechea, O Ibarra Barrueta, A Santos Ibañez, E Ardanza Aramburu, E Ibarra Garcia, I Palacios Zabalza, I Ibarrondo Larramendi, M Bustos Martinez. *Hospital Galdakao-Usansolo, Hospital Pharmacy, Galdakao, Spain* 

**Background** An electronic prescribing system (EPS) improves the prescription-validation-administration sequence and reduces errors. Nevertheless new questions can appear and it is interesting to take them into account.

**Purpose** To describe positive and negative aspects that the implementation of an EPS produces in a physician when he/she prescribes, in a nurse during the administration of the drugs and in the pharmacist when he/she validates.

**Materials and Methods** We recorded the advantages and disadvantages identified by pharmacists as seen by different professionals from the introduction in January 2010 of an EPS.

### Results

*Positive aspects* for the pharmacist: real-time validation (it avoids administration errors and facilitates communication between healthcare professionals); no unreadable or incomplete prescriptions, chance to cheque nurse records (administration time, observations and incidents); quick access to ambulatory care and other hospital admissions medicines records; ability to see and change drug administration rates and information about the drugs is instantly available from databases. Physician: availability of protocols; rapid access to the hospital formulary, automatic drug changes, automatic allergy alerts. Nurse: drugs appear automatically on the administration records, they can request medicines directly from the prescription screen.

*Negative aspects* for the pharmacist: repeated validation is required of unchanged prescriptions; errors can be made if the medicine is changed (e.g. duration of treatment). Physician: errors due to lack of knowledge of trade names (e.g. insulin); the existence of protocols can lead to incorrect prescriptions (e.g. for elderly people); errors due to ignorance of the programme (former frequencies of administration are retained); need to delete old prescriptions. Nurse: they cannot change the administration schedule; some services don't use yet the EPS.

**Conclusions** The implementation of EPS improves many aspects for all the health professionals involved. Pharmacist validation is more complete, real time and faster. It is necessary to know the programme well to detect new errors as they arise in order to correct them.

No conflict of interest.

#### OHP-006 ADVERSE EFFECTS OF DAY-HOSPITAL CANCER TREATMENT MONITORED AT HOME: CREATION OF A PHYSICIANÑPATIENT LOGBOOK

doi:10.1136/ejhpharm-2013-000276.380

<sup>1</sup><u>F Slimano</u>, <sup>2</sup>C Catoire, <sup>1</sup>L De Mestier, <sup>3</sup>A Thierry, <sup>1</sup>J Volet, <sup>1</sup>L Petit, <sup>2</sup>F Burde, <sup>1</sup>O Bouche. <sup>1</sup>University Hospital, Medicine Ambulatory Unit – Oncology-Hematology, Reims Cedex, France; <sup>2</sup>University Hospital, Pharmacy, Reims Cedex, France; <sup>3</sup>University Hospital, Center for Research and Clinical Investigation, Reims Cedex, France

**Background** Most anticancer drugs bring adverse effects (AEs) occurring during treatment-free intervals (TIs) while the patient is at home. A significant difference exists between AEs that really