The dominating medicinal form solutions with precisely set concentration or features of extemporal medicines, which were prepared in pharmacies of Lviv city for 2008. RESULTS: Economic outcomes. averagely dominate standard TPN, as it results associated with better clinical and probability of resulting cost/effective if the decision maker is willing to pay up to is completely offset by the reduction in ICU costs, and by antibiotic costs for the treatment of the child depending on age and weights of the body, accompanying severity of the disease, but they must comply with EC regulations. There has been little to no economic research conducted with products in these categories. CONCLUSIONS: Medical foods and FSMPs can play a key role in the nutritional and metabolic support of patients with certain diseases and conditions, although their economic impact has not been studied.

**ALANYL-Glutamine Dipeptide (Dipeptiven®) in Total Parenteral Nutrition (TPN) Therapy in Critically Ill Italian Patients: A Pharmacoeconomic Simulation Model**

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OBJECTIVES: Several clinical trials have demonstrated that the supplementation of Dipeptiven® in critically ill patients in Intensive Care Units (ICUs) is associated with better clinical outcomes, such as reduction of the infection rate, shortening of ICU and hospital lengths of stay (LOS), and a trend toward reduced mortality, when compared to standard TPN regimens. Aim of the current study is the pharmacoeconomic evaluation of Dipeptiven vs. standard TPN in critically ill patients admitted to Italian ICUs. METHODS: The analysis is based on a Discrete Event Simulation model that incorporates: a) baseline outcomes rates from the 2007 GIVITI report (data from 200 Italian ICUs and over 60,000 patients); b) Dipeptiven® efficacy from systematic review and meta-analysis with a Bayesian Random-Effects model of the published clinical trials; c) national cost data in the perspective of the hospital from published sources. The simulated clinical outcomes are: death rate in ICU; infection rate in ICU; death rate in general ward; hospital LOS, divided into LOS pre-ICU, LOS in ICU, and LOS in hospital ward; 30-day and 90-day mortality. One-way and probabilistic sensitivity analyses were performed and the cost-effectiveness acceptability curve generated. RESULTS: Dipeptiven® results more effective and less costly than standard TPN reducing mortality rate (23.55% vs. 15.2%, p<0.01), infection rate (15.91% vs. 3.94%, p<0.01), overall hospital LOS (25.47 days vs. 26.00 days, p<0.01), and total cost per patient (23,922 vs. 24,145, p<0.01). This indicates that treatment cost is completely offset by the reduction in ICU costs, and by antibiotic costs for the treatment of ICU-emergent infections. The cost-effectiveness acceptability curve shows that Dipeptiven® has an estimated 78% probability of resulting dominant and a 93% probability of resulting cost-effective if the decision maker is willing to pay up to €1,500 to avoid one patient death. CONCLUSIONS: Dipeptiven® is expected to averagely dominate standard TPN, as it results associated with better clinical and economical outcomes.

**THE PHARMACOECONOMIC ANALYSIS OF EXTEMPORAL MEDICATIONS USED FOR TREATMENT OF DISEASES AT CHILDREN IN UKRAINE**

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OBJECTIVES: In Ukraine the medical products made in pharmacies by extemporaneous use are very popular, in particular for treatment of children though the quantity of the pharmacies engaged in extemporaneous preparation every year decreases in connection with economic conditions, features of licensing of such activity in Ukraine. Use extemporaneous preparation with precisely picked up concentration corresponding to the indication (the medical form (the suppositories, a dressed out powder) allows to provide individualized therapy of the child depending on age and weights of the body, accompanying severity of the disease (for example a diabetes). METHODS: We have carried out the AAS- analysis of extemporaneous preparations, which were prepared in pharmacies of Lviv city for 2008. RESULTS: Sample list of extemporaneous medicines has made 44 names for 2000 recipes. The dominating medicinal form solutions with precisely set concentration or features of their technological manufacturing make 45%. Also prepare for ointments (21%), dressed out powders (18%), suspensions (7%), mixtures (5%), suppositories (4%). Among medicinal forms are submitted a solution of clohdroxyacetic acid with pepsi- num, used for excitation of appetite at children, the recipe—Lassar paste for treatment of dermatitis at children. Such medicines are not made with a pharmaceutical industry. CONCLUSIONS: We have defined, that cost of extemporaneous medicines, in particular solutions makes 4-16 UAH (1 $ = 7.7 UAH), ointments 8-27 UAH, powders of 2-6 UAH, suspension of 11-18 UAH. These extemporaneous medicines are economically accessible to treatment for children in Ukraine.

**COSTS OF BLEEDING RELATED COMPLICATIONS AND BLOOD PRODUCT TRANSFUSIONS AMONG SURGICAL PATIENTS**

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OBJECTIVES: Inadequate surgical hemostasis may lead to bleeding related complications and transfusion. The aim of this analysis was to examine the incidence and costs of bleeding complications and blood product transfusions for patients undergoing inpatient surgeries. METHODS: A retrospective analysis was conducted using Premier’s Perspective hospital database. Patients who had a procedure within a specialty of interest (i.e. cardiac, vascular, non-cardiac thoracic, solid organ, reproductive organ or kneehip replacement) in 2006 or 2007 were identified via ICD-9 code procedures. For each specialty, rate of bleeding complications (including bleeding event, re-operation to control for bleeding and blood product transfusions) were examined, and cost of hospitalization and length of stay (LOS) were compared between surgeries with versus without complications. The incremental costs were based on a multivariate analysis adjusting for demographics (e.g., age, gender, geographic region), hospital characteristics (e.g., urban versus rural, bed size) and other baseline characteristics (e.g., comorbidities, admitting diagnosis, prior hospitalization). RESULTS: A total of 647,918 cardiac, 723,624 vascular, 139,781 thoracic, 1,586,557 general, 1,032,762 reproductive organ and 247,682 knee/hip replacement surgeries were identified. The rate of bleeding complications was highest for knee/hip replacement (29.8%), followed by vascular (27.1%), non-cardiac thoracic (26.5%), solid organ (23.1%), cardiac (11.7%), general (11.4%) and reproductive organ (3.3%). Incremental LOS associated with bleeding complications or transfusions was 11.5 days for non-cardiac thoracic, 10.5 days for solid organ, 10.2 days for vascular, 9.6 days for general and 1.3 days for knee/hip replacement surgeries. The incremental cost of hospitalization associated with complications was highest for non-cardiac thoracic surgeries ($27,006), followed by vascular ($26,272), cardiac ($20,261), solid organ ($18,420), general ($7,036), reproductive organ ($6,222) and knee/hip replacement ($3,246). CONCLUSIONS: This study shows that increased hospital LOS and cost associated with bleeding complications and transfusions, and supports implementation of blood conservation strategies.

**A SYSTEMATIC REVIEW EVALUATING COST-EFFECTIVENESS OF ACUPUNCTURE**

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OBJECTIVES: Acupuncture is widely used for various diseases such as chronic low back pain and osteoarthritis, but the cost-effectiveness of acupuncture has not been fully explored. The aim of this review is to summarize and assess randomized controlled trials (RCTs) of acupuncture for economic evaluation. METHODS: Thirteen RCTs that met the inclusion and exclusion criteria underwent a full-text review. RESULTS: Thirteen RCTs that met the inclusion and exclusion criteria underwent a full-text review. Acupuncture with usual care was compared with usual care only in all studies. Nine studies were applied for pain condition including low back pain, headache, and dysmenorrhea. The reporting quality of the studies was poor for certain items. Nine studies described incremental cost-effectiveness ratio (ICER) or incremental cost per quality adjusted life year. Most studies suggested that additional acupuncture treatment was cost-effective compared to the usual care for low back pain, headache, dysmenorrhea, osteoarthritis, angina pectoris, and allergic rhinitis. CONCLUSIONS: This systematic review showed the cost-effectiveness of additional acupuncture treatment, but including studies were very few and applied diseases were limited. Therefore the results could not be generalized due to diversity of disease and different status of each country. The more number of economic evaluations of acupuncture are necessary to firm the evidence.