Low-cost-implementation of patient safety integrating highly realistic paediatric life support courses (EPLS-ERC) in cardiopulmonary exercise testing laboratory as training center

Introduction: inspiration of our concept were the development of paediatric life support courses (PLS) in Southtyrol (1998-2004), well supported financially by local public health administration (about 1.000.000 €) with later introduction in Germany/Austria (2003/2004), PLS-courses at Madrid following the more-day-module-scheme and one-group-European-Paediatric-Life Support-courses (EPLS) of European Resuscitation Council (ERC) at Poznam (Poland).

Objectives: in periods of reduced healthcare budgeds, training programmes for implementation of patient safety including PLS-courses are at risk. Mixed use of clinical structures & materials for patients assistance & for team-training could be a low cost solution.

Material & Methods: Planning the upgrade of the ergometry-lab to spiroergometry-lab at MHH Medical School Hannover, international paediatric exercise-testing-guidelines were followed for Patient safety. Local guidelines for resuscitation (PICU Paediatric Intensive Care Unit - head: M. Sasse of Dep. Paed. Cardiology & Intensive Medicine - head A. Wessel) were implemented. Trainings has been performed in the afternoons after the hours of outpatient clinic, splitting the course in Modules.

Results: first experiences of internal one-group-trainings have been performed this summer: 1 EPLS-course, 2 European Paediatric IMMEDIATE Life Support-courses (EPiLS-ERC), 5 basic resuscitation trainings in fully equiped exercise-testing-lab for Patient safety with 2 accredited ERC-instructors were successful. Only the pre-hospital Trauma-material was provided externally by Paramedic school of Hannover Firebrigade. Workload of participants and instructors has been provided only partially by health administration. No supplementary costs for room and material. Good evaluation of the project by course participants. (update of data: 1 Oct. 2010)

Conclusions: The one-group-course-model in just prepared and equipped clinical environment increases course quality and reduces financial duties to run courses saving Patient Safety Programmes. In future educational standards should be provided completely by health administration without consuming leisure-time of health care workers, including supplementary teaching material and logistics. Prevention and education can help to reduce costs of healthcare improving patient safety. Considering low implementation of EPLS-courses in Europe (<90 courses/2008, Biarent D at SIMEUP congress Naples 2009), our experience could contribute to continental implementation and increase furtherdevelopment to simulation (www.mh-hannover.de/paedsim.html).