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Procedures of Hygiene Services and protection of the hospital environment







Nora BINISHI-DUSHI binishi.67@gmail.com,

Infection control (IC) and Healthcare Associated Infections (HCAI)

IC medical discipline & HCAI can be devastating even deadly

HCAI affects annually:

EU > 4 million patients, USA > 1.7 million patients

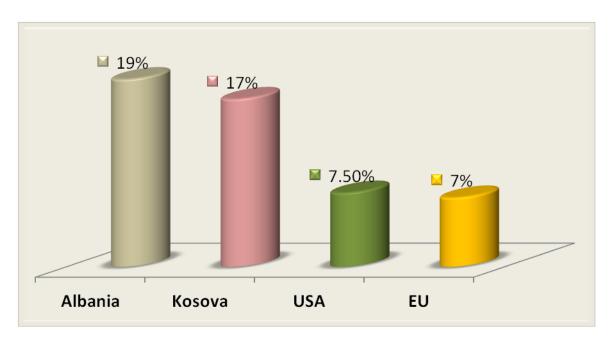
Expenses:

Europe = 7 billion € & 16 million extra days of hospital stay

USA = \$6.5 billion

Approximately 20 - 30% of HCAI are considered to be preventable by intensive hygiene and control programmes

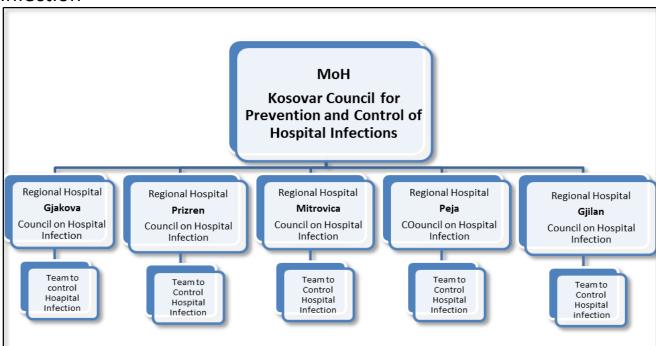
Infection rate:



Source: www.cdc.gov: www.ecdc.europe.eu www.kosovo.birn.eu.com

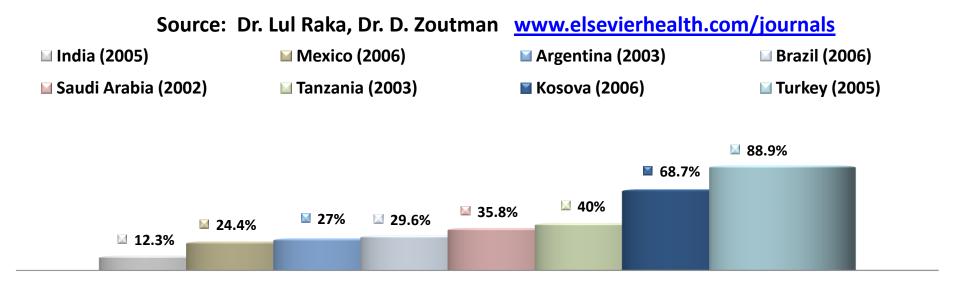
Infection Control in Kosovo's legislation

- IC in Kosovo through initiatives organized by Canadian Public Health Association on 2000
- February 2004 MoH compiled the program for prevention of HCAI
- September 2005 IC as course in teaching process at Medical Faculty
- December 2005 outbreak of the HCAI at CICU at UCCK underestimate from the GoK
- May 2006 MoH established the Kosovar Council for Prevention and Control (KCPC) of HCAI
- On 2007 KCPC in UCCK was gathered for the last time
- On 7th April 2011 Strategy and the Action Plan for Antimicrobial Resistance
- On 3rd of November 2011 Administrative Instruction No.05/2011 for Prevention and Control of Hospital Infection



Organization chart by Al No.05/2011

HCAI rates from emerging countries in CICU and Kosovo

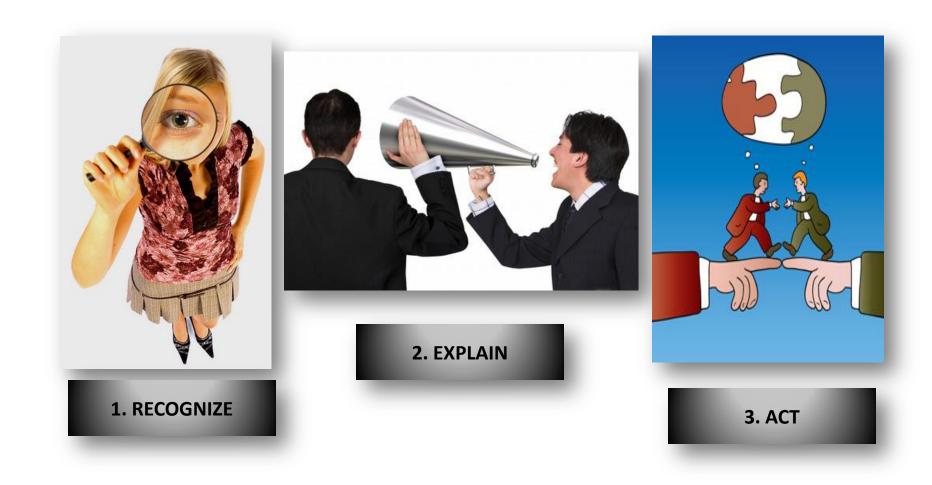


Clinical data with Acinetobacter baumanii isolated in CICU in UCCK March 16th - July 17th 2006 (<u>www.bjid.com.br</u> - by Dr. Lul Raka)

No. of patients	Gender / age	Day of isolation	Length of stay / day	Diagnosis	Outcome
30	24 males				
	6 females	3 - 26	4 - 59	Tumor Cerebral Cerebral Infarct Diabetes Politrauma Cardiac arrest Myochardia Peritonitis	Died 16
	Age 2-82				Recovered 8
					Transferred 6

Central Intensive Unit in University Clinical Center

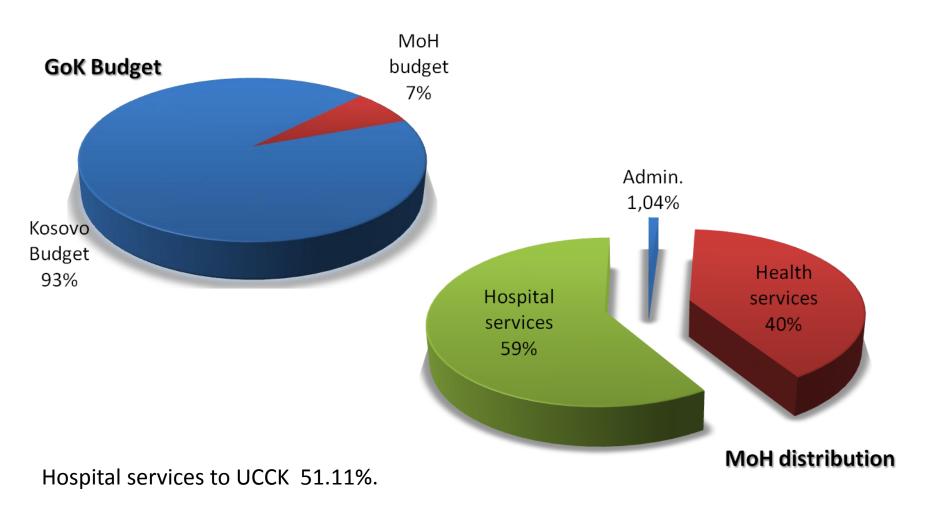




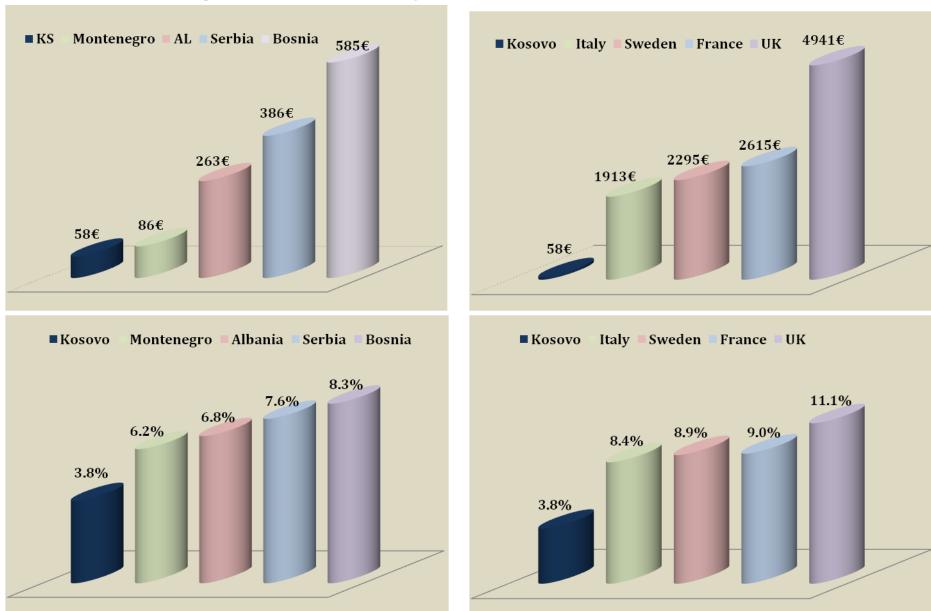
■ Dr. PittetD. Infection control and quality health care in the new millennium. AJIC 2005;33(5):234AJIC 234--244.244.1.

Government's funds for healthcare

The allocation of the Kosovo Budget for MoH~ 7% - 9%.

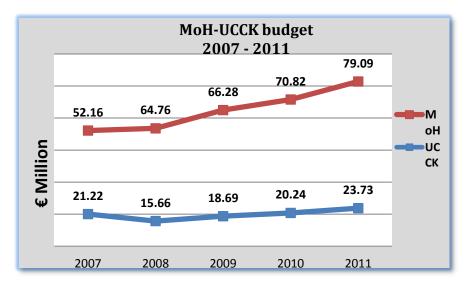


Health expenditures per capita (€) and as percentage of GDP Region and Europe (www.who.int/2006)

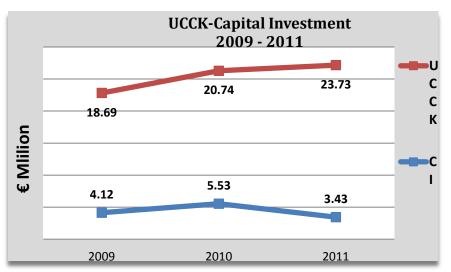


Budget allocation from MoH to UCCK

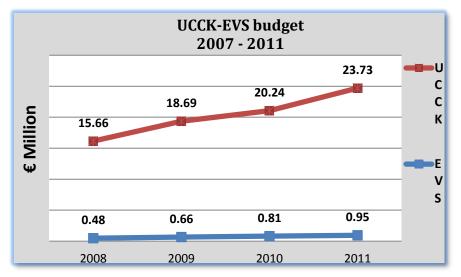
Allocation of the MoH budget to UCCK~25%



Allocation of the UCCK budget to CI~20%



Allocation of the UCCK budget to EVS~4.01%



Capital Investments

Facility renovation 40%

Medical equipment 60%

Source: Capital Investment Unit/MoH

Capital investments in University Clinical Center Are these proper renovations???

















Capital investments in University Clinical Center 60% of budget goes for these medical equipment!!!!!!















Key issues that impact improvement of EVS

• EVS is a functional unit of a HF, responsible for maintenance of environment and housekeeping

Strategy plan for functioning of UCCK







Primary & other factors that affect EVS in UCCK

Primary factors

- → Lack of strategy
- → Lack of funds
- → Lack of professional staff
- → Design of current HF
- → Poor management
- → Lack of EVS procedures

Other factors

- → Lack of support from MoH
- → Lack of cooperation
- → Lack of continuous trainings
- Poor facility infrastructure
- → No organizational hierarchy
- → Influx of patients and visitors





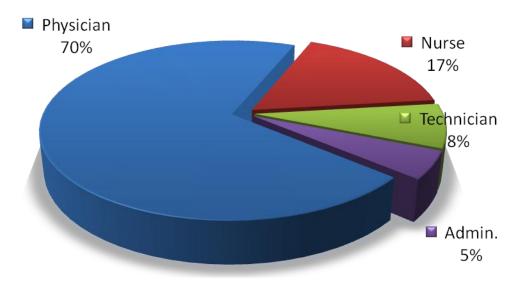
Policy makers

" If you think that health is expensive, than try disease!"

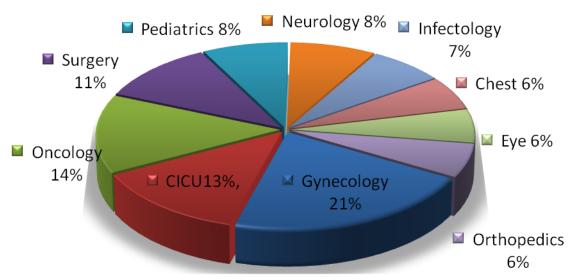
Mary Lasker "Lasker Foundation"

Research methodology

- Standard questionnaire, and
- Face to face interview with:
- * 100 Healthcare workers
- * 100 patients&visitors

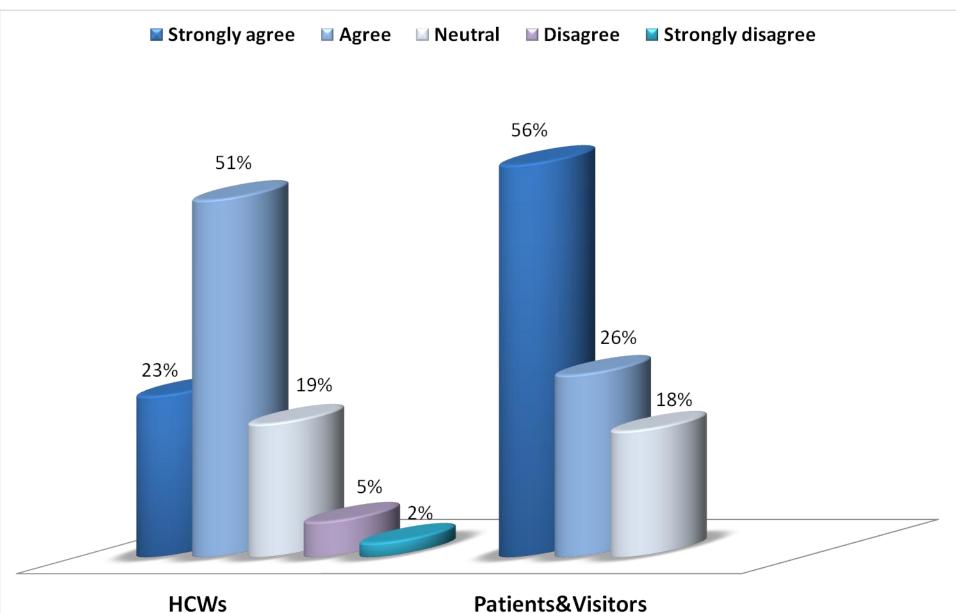


Healthcare workers



Patients treated by clinics

EVS are substandard....



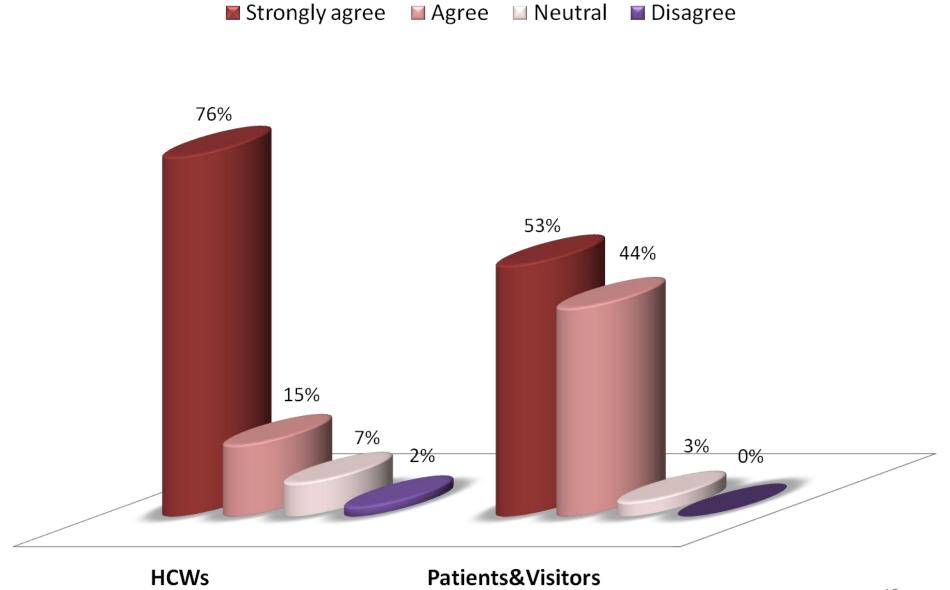
Environmental Services in University Clinical Center

The current situation across UCCK in Prishtina

Pictures taken by myself

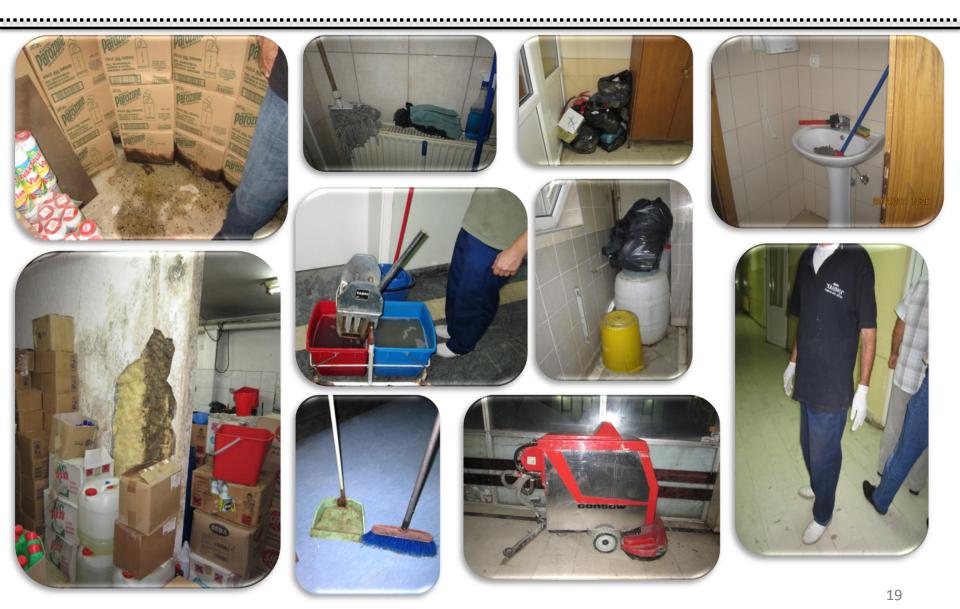


Unspecialized companies should not be engaged!!!



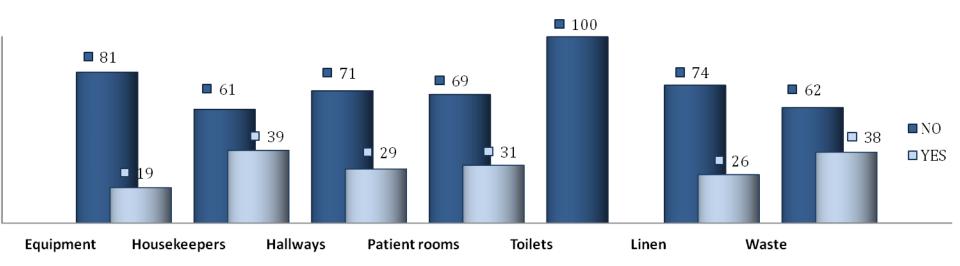
"Professional" EVS companies in University Clinical Center

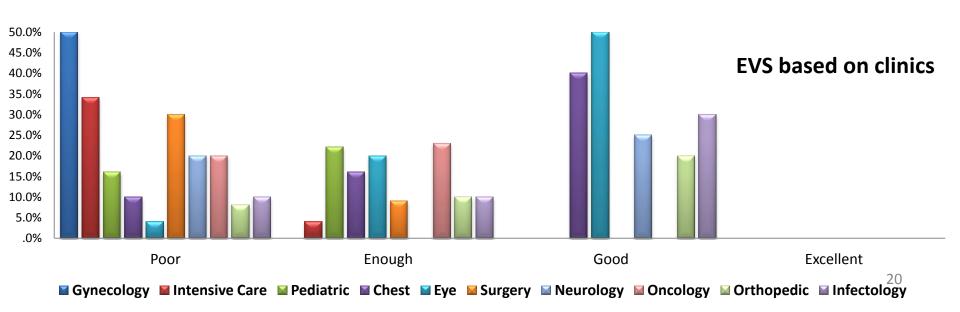
The current situation across UCCK in Prishtina
Pictures taken by myself



Survey results - patients

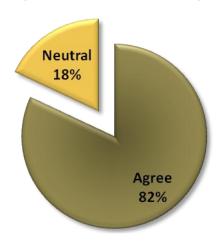
EVS performance



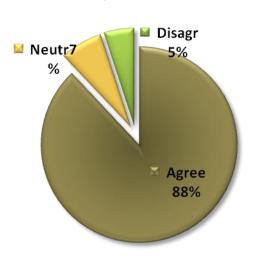


Survey results - patients

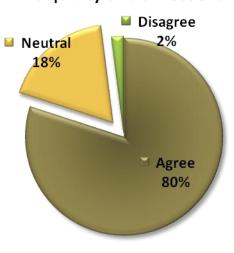




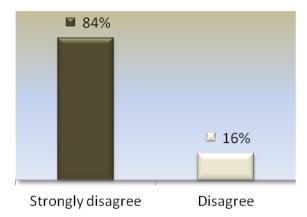
Enforce penalties to EVS



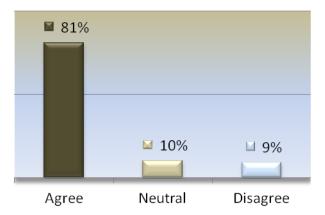
No quality of disinfections



EVS - remain the same

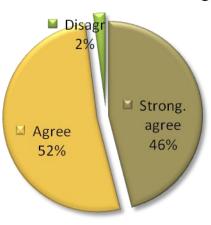


Do not recommend UCCK

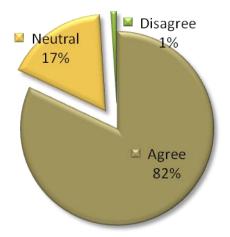


Survey results - HCWs

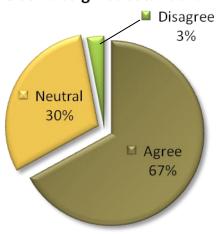
EVS-constant training



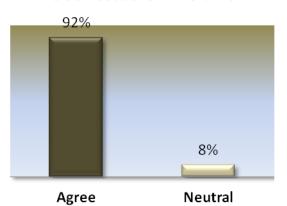
Infection control unit-inefficient



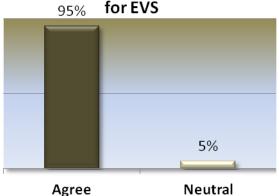
UCCK design-substandard



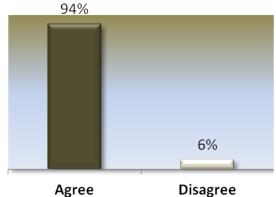
UCCK establish EVS unit



HCWs provide suggestion for EVS



GoK-increase funds



Disagree

Cleaning procedures in hospital facilities

Develop effective procedures for EVS:

- > 7 Steps of cleaning
 - > Final Inspection



Pull trash and linen



High dust process



Damp wipe contact surfaces



Clean thoroughly the toilet



Dust mop



Dump mop all areas





Final inspection

Project Recommendation





Capstone Project's 4 MAIN recommendations are:

- Assuring financial resources for EVS
- Drafting a strategy for UCCK
- Engaging professionals
- Increase capacity buildings

Other recommendations:

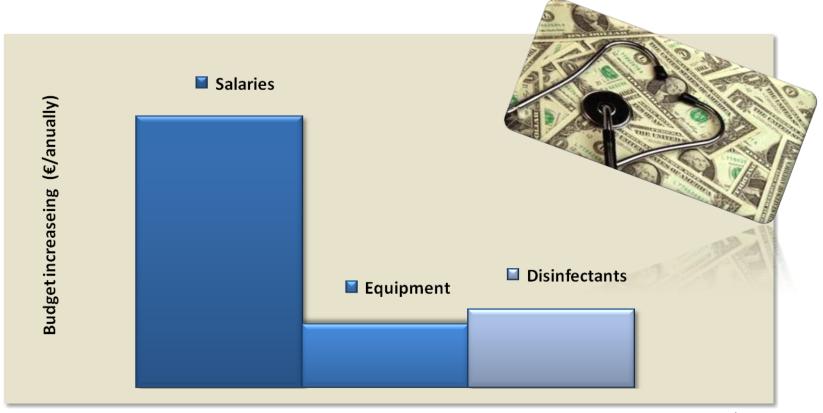
- Establish EVS unit
- Control of disinfectants
- Empower the Infection Control Unit
- Training
- Prevent influx
- Capital Investments



Budget for EVS in University Clinical Center

The Ministry of Health should increase the budget for Environmental Services by €953,646 to €1,360,150/year

Increasing will ensure sustainable performance and proper services for years to come



<u>Salaries</u> – include engagement of **329** employees which value come up to **1,061,400€**/year <u>Equipment</u> – includes motorized with **58,300€** and manual ones **64,650€** Disinfectants means – its annual value is **175,800€**

Strategy for University Clinical Center

- The Strategy should be created during 2012
- Include sub-strategies for infrastructure, staff engagement, trainings, medical equipment, and medical disposal supply
- Will lay out the five years long term plan beginning from 2013-2018 in accordance with European standards.



Recommendations

Building capacity

- ✓ Improvement of the current design and create areas as: waiting areas, toilets, utility
- ✓ Engage professional designers and use similar practices from the region

Professional companies for EVS

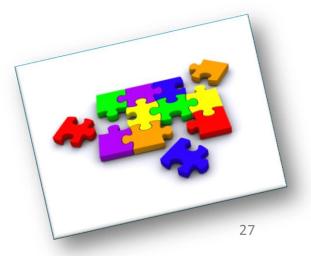
- ✓ Engage trained staff to conduct environmental services
- ✓ Encourage competition among companies

Establish an EVS unit

- ✓ Creating a special unit organized by hierarchy
- ✓ Monitoring of daily engagement by managers of EVS

Preliminary inspection of disinfectants

- √ Using proper disinfectants means as antibacterial
- ✓ Inspection of disinfectants in National Institute of Public Health



Recommendations

Empower Infection Control Unit

- √ICU enforce penalties to HCWs and EVS officials
- ✓ Act as a control body to monitor and prevent outbreak of infection

Trainings

- ✓ Provide continuous trainings of EVS
- ✓ Provide trainings of infection control prevention

Full use of hospital capacities

- ✓ Increase current use of 70% of bed to 100%
- ✓ Invest in technical supply as heating, ventilation, water-supply

Prevent the influx of visitors

- ✓ Prevention of cross contamination
- ✓ Respect the schedule



A great model to follow The Regional Hospital in Prizren





















Not a utopia but reality – Deutsches Herzzentrum in Berlin





















UCCK will have a long way to go to achieve this **George Washington University Hospital**

























"Children are our most valuable resource" (Herbert Hoover, 31st US president) – Children National Medical Center



































Question



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