

## **National Centre for Epidemiology (NCE), Budapest, Hungary.**

Those present:           HELICS – Jacques Fabry, Ian Russell.  
                                  NCE – Melles Marta (Director General), Karolina Borocz, Emese Szilagyi (HELICS contacts), Zsolt Pulay (IT contact).

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Since 1998, the “Béla Johan” National Centre for Epidemiology (NCE) has been the national headquarters in Hungary for;

- epidemiology and communicable diseases
- quality control of vaccines
- microbiology laboratories

The Minister of Health is delegated the responsibility for health in Hungary via the position of Chief Medical Officer. This position receives professional support from the Institute of Public Health, the Health Promotion Institute and, in the area of epidemiology, from the Béla Johan centre (NCE). The NCE has about 380 staff, including 200 graduates. There are 22 reference laboratories, country/town institutes and professional links are maintained with hospitals.

The three main fields of work are laboratories, rapid response in epidemiology and a weekly published bulletin “EpiInfo” plus website. The centre has responsibilities for training and methodological guidelines are published in “EpiInfo”. The centre participates in the training programmes of medical universities, it is a member of scientific organisations and it organises scientific conferences. It has been involved in 2 developments under the PHARE programme for assessing countries in the areas of informatics and laboratory diagnostics.

Mandatory reporting on hospital diseases became required during the period of the 1970’s. Training on Nosocomial Infection and NI outbreaks started then. During the 1980’s the following regulations were introduced;

- every hospital had to form a team for hospital hygiene/NI.
- each team had to have a doctor and hygiene controller.
- the roles within the team were well defined.
- responsibility was given to investigate outbreaks.
- the NI situation in the hospital was evaluated and reported annually.
- professionally the team belongs to the hospital management.
- the NCE provides medical training for the team.

The system is still in place now. Recently, interest in NI has increased as a result of the quality control process and also on the part of the public when outbreaks occur. The epidemiological situation in general in Hungary is favourable. Vaccine preventable diseases are non existent, hepatitis B carriers are low (1.4%) and HIV prevalence is only 0.05%. This situation has arisen due to strict epidemiological measures such as mandatory vaccination and the early introduction of AIDS/HIV screening. Hungary would now like to join NI surveillance in the HELICS programme. National Health decision makers are supportive and an IT system is being developed which will facilitate the process.

During the period when reporting was mandatory, 0.04% of discharged patients were reported to have had NI. Now, hospitals are invited to report sporadic cases on a voluntary basis and the prevalence is now reported as 1.5%. 'Sporadic' means that a reporting form is implemented in hospitals on a voluntary basis. For hospitals which volunteer, there is one person nominated for data collection on NI. Since 1998, the training of NI nurses started in Hungary. These nurses are trained for a period of 11 months and only qualified nurses with a minimum of two years experience can attend the course. The number of these nurses is very low (about 200 – 250). However, new government legislation aims for 1 NI nurse per 200/250 hospital beds.

A presentation of the situation of Hospital Infections in 2003 in Hungary was given.

### Situation of Hospital Infections – 2003

Largest group – skin infections – 69% [6203 no.] – includes pressure ulcers.

Second largest group – surgical site infections – 17%.

Third largest group – UTI – 11%.

### Nosocomial Outbreaks in Hungary 2000 – 2003

Nosocomial outbreaks require to be reported.

65% non-specific [83 no.].

### Pathogens of specific nosocomial outbreaks (reported to NCE in 2003)

Largest group – MRSA – 83%.

### MRSA Outbreaks 1993/2003

Significant increase shown since 1999.

Relatively small number of patients involved.

Fatality is high (about 10%) because they are related to bloodstream infections (secondary infections related to surgical infections).

### MRSA Nosocomial Outbreaks by type of unit affected

Largest group – ICU – 27%.

### Proposed Nosocomial Surveillance System in Hungary

The following options will be offered to hospitals in Hungary and they will be able to choose which options to follow;

- SSI HELICS (suggested/recommended).
- Surveillance in surgical units: SSI + other infections (pneumonia, urinary, bloodstream, ...). HELICS + CDC.
- ICU/NIC ('CDC unit based' proposed for now, will be developed into HELICS ICU in the future).
- Hospital wide (CDC).

Of the 160 hospitals in Hungary, about 50 are expected to follow the HELICS SSI via one of the first two options above.

Hospitals will not require a special software as the system currently under development will be internet based. Data transferred to the centre will be analysed at the national level. It is hoped that after implementation of HELICS SSI, providing data for July – December, 2004, HELICS ICU will start towards the end of 2004, providing data in 2005 (level 1).

Training is being provided to the 160 hospitals on a quarterly basis in order to support the implementation of the new surveillance scheme. Extra funding is also being provided at a national level to these hospitals to set up systems and employ staff. Data validation methods to support the surveillance are currently being considered.

The National Nosocomial Surveillance System in Hungary will publish results annually, after analysis at the NCE. The following special reports will be prepared;

- NI caused by multi resistant organisms.
- BSI surveillance.
- Nosocomial outbreaks.
- Database of disinfectants.

Although the representativeness of the data in Hungary is thought to be good, formal methods to evaluate the representativeness of the data which will be collected in the system will be assessed later. Post discharge surveillance is not being considered at present.

A demonstration of the IT system currently under development was given by Zsolt Pulay. The salient features of the system are as follows;

- Oracle database, java based development, for use on the Web.
- allows data submission at the hospital level to the national database.
- data for a particular hospital can be viewed by that hospital locally.
- data analysis is carried out at the centre (not part of IT system) and fed back to hospitals on a six monthly basis.
- some data validation rules are incorporated in the system.

The proposed HELICS Database Management System software, currently under development, was presented and discussed along with the impact/interface with surveillance activities in Hungary. Specific aspects and queries regarding the HELICS protocols and the HELICS data specification were also discussed.

An overview of the current progress of the HELICS project was presented;

- the preliminary analysis carried out at the Brussels meeting in December following the retrospective data collection to the end of 2003 will be finalised soon and the Statistical Report will be issued.
- Beyond the end of the current funding period (after December 2004), there will be three possible strands of activities. Firstly, it is hoped that the HELICS surveillance activity will continue, albeit perhaps in a reduced scale, with a view in due course to handing over management of the HELICS database depending on the requirements of the new ECDC. In addition, two new proposals for funding

have been made to the EU. The first is 'NosoVal', submitted as a research project under the Sixth Framework Programme, which will concern the validity of data collected under the national NI surveillance programmes. The second is 'IPSE' (Improving Patient Safety in Europe), submitted under the DG SANCO Call for Proposals 2004, which is a broader programme than HELICS which will be oriented towards the prevention and control of infection. The possibility for Hungary to participate in these future activities will exist should the requested funding become available.

- the importance of informing the national representatives on the network committee about the nature and progress of surveillance work within the country was emphasised, so that this information could be disseminated at the network meetings.