

O-004

Community services for Malta's growing elderly population: screening - the missing link in our portfolio?

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Aims: to review the basis for screening of community dwelling elders in other EU countries such as Sweden, Germany and the UK and discuss the feasibility/missed opportunity in Malta's failure to even conceive such screening.

Methods: a brief review of the available services in the community to address the needs of Malta's growing elderly population is presented. A thorough assessment of the basis for the decision to screen elderly persons in their homes in other EU countries and the evidence that exists at present in favour of such screening. Expected gains in terms of the population's health and in potential cost-benefit are discussed with the aim of quantifying what Malta stands to gain or lose by such screening.

Results: costs involved in national screening programmes of community dwelling elderly persons are clearly very high. However, gains expected in terms of quality of life, reduced admissions to residential care and even life years gained could well outweigh such costs.

Discussion: Malta's current economic situation is such that, despite the potential gains, including financial ones in terms of health care savings, it is unlikely that such a strategy will be considered in the foreseeable future locally.

Conclusion: screening of Malta's growing elderly population could remain the missing link in our range of services. Such an expensive facility could reduce the evident, growing demands for institutional care which is ultimately a more costly option.

O-005

The implications of the European Union on the Maltese health care system

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Following a national referendum Malta joined the European Union (EU) on the 1st of May 2004 to become the smallest Member State, at the southern most border of the enlarged European Community. As a small island state with a long tradition of medical care it has a sophisticated medical infrastructure that compares very favorably with industrial Western European countries offering a wide scope of treatment as a benefits-in-kind health care package. A challenging scenario could develop when the Single European Market rules as applicable to the EU healthcare policy are transposed to the Maltese Health Care System with its unique geopolitical context. Proactively reacting to these challenges necessitates policy makers to consider from various options, the two main ones being: 1. Constrict the offered health care package, and re-dimension the medical infrastructure so as to have a similar situation akin to that of Luxembourg, another small EU Member State with a comparable population base. 2. Build on the existing medical infrastructure in a way to take advantage of the recent EU membership. Malta as an island in the Mediterranean, with a service economy based mostly on tourism, could project itself as an ideal country for Northern European elderly citizens to have an alternative residence. A predilection to this option, or its possible hybrid variations could well succeed in preserving the 'ethos' of the Maltese Health Care System. To follow this re-crafted strategy, the Maltese Health Care system needs to re-orient to the realities and implications of EU policies in healthcare and contribute in their development at EU level in a manner to derive advantage from their evolution. Recommendations are suggested on how this could be achieved and transform EU membership from a potential threat to the Maltese Health Care System into an opportunistic challenge.

O-006

Is MRSA control an achievable target in Malta and what will it cost?

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Methicillin resistant *Staphylococcus aureus* (MRSA) infections remain a major infectious disease challenge within the Maltese Islands. From the first outbreak with St Luke's Hospital in 1995, cases have continued to increase in the past decade to reach a situation whereby more than 45% of *Staphylococcus aureus* isolates from blood cultures are methicillin resistant, one of the highest in Europe. In addition there is evidence of an ever-increasing prevalence of community MRSA. Several factors undoubtedly play a role in the local endemicity of MRSA. Overcrowding within St Luke's Hospital (St Luke's Hospital) has already been identified to be a major instigator behind MRSA incidence especially in medical wards. Antibiotic consumption is recognised as a major driver of resistance and indications are that antibiotic use in Malta is also on the high side. Furthermore studies of hand hygiene compliance, a cornerstone of nosocomial infection prevention, suggest a need for major improvement. Targeting these three risk factors is vital to achieve a successful outcome but will not necessarily reverse the situation. Isolation of positive MRSA cases remains critical to ultimate control. Recent mathematical modelling data suggests that a comprehensive search and destroy policy is the only effective solution to eradicate MRSA. In high endemicity situations this will require a comprehensive programme of patient screening both on admission as well as of all contacts of cases diagnosed during the hospital stay, both patients and staff. The availability of sufficient isolation beds is a prerequisite and even if this were to be done, the modelling data suggests that based on current prevalence in St Luke's Hospital, 15-20 years will need to elapse before full control is achieved.

O-007

MRSA in autopsy cases

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Nasal carriage of *Staphylococcus aureus* has become a means of persistence and spread of multiresistant staphylococci, especially Methicillin-resistant *Staph. aureus* (MRSA). MRSA has become a public health threat, both in hospitals and more recently in the community.

Aim: This study should indicate whether antibiotic medication and hospital stay predispose to nasal colonisation with *Staph. aureus* including MRSA when compared to a second cohort that had not been admitted to hospital recently.

Method: Nasal swabs were obtained from cadavers prior to undergoing post-mortem examinations. The nasal swabs were taken to the Bacteriology Lab where attempts were made to culture *Staph. aureus* from the nasal swabs. Staphylococci were tested for their antibiotic susceptibility. The organisms that were resistant to oxacillin were tested using a Penicillin Binding Protein (PBP2a) Latex Agglutination test, which is a confirmatory test for MRSA.

Results: From the 43 specimens taken, 34 of these had not been hospitalised before death. The remaining 9 died in hospital. 44% of the patients not hospitalised were colonised with *Staph. aureus*. 3 out of the 15 patients colonised with *Staph. aureus*, were MRSA positive (i.e. 9% of the non-hospitalised population).

This cohort is compared to hospitalised patients, where 33% were colonised with *Staph. aureus*; of these, 2 out of 3 patients were MRSA positive (i.e. 22% of the hospitalised patients were colonised with MRSA).

Conclusion: These preliminary findings provide confirmatory evidence that hospitalisation increases the incidence of MRSA carriage compared to the non-hospitalised population.