# MILLENNIUM FEATURE Public Health Medicine in Malta – Past, Present and Future

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ABSTRACT: This article highlights some of the significant developments in public health including the pattern of disease in past centuries when emphasis was on sanitation and control of epidemics. The improved social conditions as well as health care developments during the past decades have not only changed this pattern, but have also modified the approach to public health. The future presents us with challenges which we must face through appreciation of the issues involved and the use of appropriate strategies.

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### Introduction

Public Health Medicine in Malta like in many other countries has undergone significant developments over the past centuries. The earlier focus on sanitation and predominantly reactive approach to the massive epidemics which killed thousands of human beings has given way to a planned preventive approach to health based on equity as a result of the better understanding of the social and other determinants of health. Immunisation introduced by Jenner in 1798 has since been recognized as one of the best and most cost-effective ways to control communicable diseases, many of which have been virtually eradicated from our midst. Despite these successes, we are facing other disease patterns with related problems and challenges particularly in the field of non-communicable disease. There is now more emphasis on primary health care and health promotion

#### The Past

Dr Paul Cassar in his "Medical History of Malta<sup>1</sup>" gives us an excellent description of the developments in public health in Malta since the early sixteenth century and this part highlights some of the many developments to which he refers.

On their arrival in Malta in 1530, the Knights of St John applied the Code of Health Laws they were already implementing in Rhodes. This code was fairly comprehensive for those times. It included among others, the notification of contagious disease, quarantine restrictions, burial permits, control of leprosy, licences to practise medicine and surgery, control of sale of drugs and the responsibilities of apothecaries. A Health Commission was set up and this was responsible for the shielding of the island against the importation of disease. Supervision of sanitation was the responsibility of the *Magistrus Sanitatis* while the *Pro-tomedicus* or Physician-in-Chief was appointed.

Under British rule environmental health was entrusted to District Medical Officers and the Medical Police headed by the Police Physician of Valletta. This included inspection of food and of pharmacies, quarantine and prevention of spread of disease in general. By 1863 various health laws were enacted amongst which was Ordinance II of 1862 which provided for the registration of births, marriages and deaths. The office of Social Statistics was opened in 1868. Water supply was extended, lead water pipes were abolished and the sewerage system was improved.

The Sanitary Office was created in 1875. Its functions included food hygiene (and analysis of food), investigation of cases of infectious disease, vaccination against smallpox, registration of deaths and burials, recording of disease and mortality amongst animals and publication of fortnightly statistics. The Office was headed by the Chief Sanitary Officer or Chief Police Physician. Malta was divided into 12 Sanitary districts each with a district sanitary officer and a Government Analyst was appointed. At first the Office formed part of the Medical Police.

Ordinance VII of 1885 annexed this Office to the Department of Charitable Institutions and created the post of Chief Government Medical Officer (CGMO) who was directly responsible to Government. This law also provided for Quarantine Officers and District Medical Officers, a Board of Health and a Medical Board chaired by the CGMO. These were the forerunners of the present Council of Health and the Medical Council.

In 1895 the Public Health Department was revived with the CGMO as its head and later the Four Sanitary Laws were published. These formed the basis of the present Department of Health (Constitution) Ordinance, the Medical and Kindred Professions Ordinance, the Food, Drugs and Drinking Water Act, and the Prevention of Disease Ordinance. The Board of Health was replaced by the Council of Health and the duties of Medical Officers of Health and of Sanitary (later Health) Inspectors were laid down by law. The Second Sanitary Law regulated the practice of health professions. A School Medical Service was started in 1929.

The next major development in health legislation was in  $\cdot$  1937 when the Department of Public Health was merged with the Department of Charitable Institutions as the new Medical and Health Department under the CGMO. Subsequent legislation changed the name to Department of Health.

As is to be expected contagious disease predominated until relatively recent years. Fever was a common diagnosis, commonly treated by blood-letting, and it was not before the time of the Crimean War that enteric fever and undulant fever were recognized as specific illnesses. Leprosy was endemic. Several epidemics were attributed to malaria in the 18<sup>th</sup> and 19<sup>th</sup> centuries but at the end of the latter century it was recognized that malaria did occur but only rarely and was not indigenous.

Plague epidemics were common, worst in the 16<sup>th</sup> century. The 1592-93 epidemic resulted in quarantine being imposed on Malta by neighbouring Mediterranean ports. As a result there was serious shortage of grain. On the other hand, Quarantine restrictions in Malta entailed the death penalty for breach of quarantine.

Epidemics of smallpox and cholera were not uncommon. The last case of cholera occurred in 1911, while smallpox, controlled by vaccination introduced in 1814 and made compulsory in 1855 was last reported in 1948. Tuberculosis was common and the Connaught Hospital opened in 1909 in Rabat was the place where the patients were treated until an *ad hoc* wing was opened in St Luke Hospital and later at St Vincent de Paule Hospital.

Malta's name became unfairly linked with Brucellosis since the start of the 20<sup>th</sup> century when British troops were falling sick with the disease while in Malta. This led to the setting up of the 1904-06 Royal Commission headed by Sir David Bruce who had earlier discovered the causative microorganism of this disease. Our Sir Temi Zammit was a Member of this Commission and it was his chance discovery of local infected goats that led to his identifying the mode of transmission of the disease. Pasteurisation was introduced in 1938 and made compulsory after the second world war.

Poliomyelitis first made notifiable in 1921 was eradicated in the sixties following mass immunization The same applies to Diphtheria which was a common cause of death in infants and children.

#### The Present

With the improvement of social conditions, improvement in hygiene and sanitation, the wider availability of high quality medical care, the introduction of newer vaccines and antibiotics, and a strong public health leadership, the health conditions in Malta improved considerably over the past decades. Infectious diseases which killed and maimed in their stride have given way to noncommunicable disease as the major cause of mortality and morbidity in Malta. Cardiovascular diseases account for around half the deaths in Malta with malignant diseases accounting for around another quarter. Diabetes, which has a high prevalence in Malta, and accidents are also major causes of death. One needs to put in a word of caution as regards infectious disease. When it was thought that the battle was won, we were faced with the new killer disease- AIDS.

We are at present reaping the benefits of massive investment in health which successive administrations have ensured even though one may always argue that the investment is not enough. Malta does not lag behind in the newer technologies and latest drugs as these become available, despite their enormous cost and the threat of non-sustainability of our health care system where in terms of demands as against the needs within our limited resources, the sky seems to be the limit. Specialities and sub-specialities have mushroomed, all manned by qualified staff. Training of health care professionals is now carried out at our University. Moreover, the Public Health Department of the Faculty of Medicine of our University is now running postgraduate courses in public health medicine at Masters level.

At the administrative level, there has been a restructuring of the Health Department (now called the Health Division within the Ministry of Health). There are new Departments of Primary Care, Health Policy and Planning, Health Promotion as well as Health Information besides the traditional Public Health and Hospital sectors which are now Departments in their own right. The greater importance now given to primary care follows the WHO Strategy of Health for All to which Malta is committed, and the related health targets include the strategy for reduction in prevalence of chronic disease through promotion of healthy lifestyles. Prevention is being given its due importance and in line with Government's aspiration of joining the European Union, environmental monitoring is likely to receive a boost.

Medical care in government hospitals, health centers and other clinics, formerly available free of charge only to the indigent since at least the fifteenth century, is now available free of charge at point of delivery to all the population irrespective of means. Free medicines are limited to a means test as well as to persons suffering from listed (Schedule V) chronic diseases. A significant proportion of the population is thus entitled to a certain extent to free medicines. The soaring costs of medical care present a serious problem.

In terms of health status, Malta has very good indicators. Infant Mortality Rate has fallen from the wartime figures of around 340 per thousand live births to a single figure. Maternal Mortality is rare, while expectation of life at birth is among the highest in Europe. Like other developed countries, Malta has an ageing population with 12 % of the population being 65 years of age or over, and a projected figure of over 20 % by the year 2025.

#### The Future

Public Health will be higher on the political agenda, more actively debated and expected to deliver more than at any time in the recent past. More than any other speciality, public health is influenced by political and service changes. Four perspectives will be scrutinized here – equity, ageing, standards and multidisciplinary public health. Common to all is the acceptance that the health of the world's citizens is inextricably linked and is less likely to be determined solely by events within geographical boundaries. The threat posed by emerging and re-emerging infectious diseases is accentuated by changes in human behaviour, changes in ecology and climate, land use patterns, economic development, tourism and migration.

### Equity

The link between socio-economic deprivation and illhealth has long been recognized but is likely to be tackled with greater commitment and constructive planning<sup>2</sup>. There is consistent evidence that disadvantaged groups have poorer survival chances, suffer a heavier burden of illness, and experience the onset of chronic illness and disability at younger ages.

The aim of a policy of equity and health is not to eliminate all health differences but rather to reduce or eliminate those that result from factors which are both avoidable and unfair.

Equity in health care involves

(a) equal access to available care for equal need this implies equal entitlement to the available services for everyone. This access could however be unnecessarily restricted if a country's available resources are spent almost exclusively on hospital services which cater for a small segment of the population, while little provision is made for balanced health care services of benefit to the majority. The soaring costs of health care are causing serious headaches to health planners in their efforts to sustain health care provision;

(b) Equal utilization for equal need;

(c) equal quality of care for all –

This issue is particularly pertinent when resources are scarce or are being cut back. Everyone is entitled to expect the same high standard of professional care irrespective of class or occupation

## Ageing

Fundamental changes in the age-structure of the population of most societies will continue to occur; it is estimated that in the more developed regions by the year 2005, one person in every four will be 60 years old or more.

The economic and social impact of this 'ageing of populations' is causing many countries to re-examine their policies in the light of the principle that the elderly can constitute a valuable component of a society's human resources as well as assist those with long term needs. Special efforts are needed to enable healthy old people to remain in their own homes and community by ensuring that adequate support is available. 'Healthy ageing' can contribute to society by providing volunteers and care givers. This inter-generational relationship needs to be developed in the  $21^{st}$  century – with the young having the skills, energy and financial resources to enhance the life of their elders, and the old the wisdom and experience to pass on to them.

### Standards

The need to strengthen academic public health is well recognized. The EU has set minimum requirements for medical training at undergraduate and specialist level. Public Health Medicine is one of the EU listed specialities The Faculty of Public Health Medicine of the Royal Colleges of Physicians of the United Kingdom, for its part, will continue to play a key role in the establishment of standards and criteria for professional practice including audit, continuing professional development, revalidation and governance.

## **Multidisciplinary Public Health**

At its Annual General Meeting the same Faculty committed itself to supporting multidisciplinary public health which incorporates non-medical practitioners such as nurses, environmental health and social scientists, health promotion and health education disciplines, etc. This will involve defining core standards which apply to all public health practitioners irrespective of their base discipline, as well as specific standards which apply to public health physicians and public health scientists. It is certainly time for social scientists to cease seeing medicine as the enemy and for medicine to start taking social scientists seriously<sup>3</sup>. The distinct role of the public health physician within a multidisciplinary team will have to be identified and argued for. It has already become clear that public health managers require a combination of specialist clinical skills and management skills.

The public health of the  $21^{st}$  century will be significantly different from that of the  $20^{th}$  century. Current ground-breaking genome research will shift the balance from diagnosis and treatment of disease to prediction or early detection and hopefully prevention; outcomes will be assessed in terms of value for money and emphasis will be on active ageing, encouraging individuals to participate fully in society regardless of their age.

The above considerations are also very relevant to Malta.

#### References

- 1. Cassar P. Medical History of Malta pp 153-297.
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