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Primary health care at the turn of the millennium - Evolution, changes and contrasts

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Primary health care is a form of front-line medicine comparable to a valve with a filter. If either is blocked or weak, large amounts of relatively unimportant and trivial material will overflow, causing confusion and delays in the secondary channels. Changes in front-line medicine have repercussions in the secondary and tertiary health care sectors. The realities outlined below should suggest that evolutionary progress rather than outright radical change would be more suitable in the foreseeable future.

General practice is the most worthwhile value for money asset in the health care sector that the country holds. Besides being highly affordable, primary health care has a high humanitarian input, provides excellent illness prevention, and a high standard of treatment and out of hospital management. One should have no hesitation to state that taking all the above yardsticks, GPs in Malta are among the best of their breed. The public is spoilt both for choice and affordability. The situation starts to hurt patients when it comes to meeting the drug and special investigation bill. Some form of social assistance to cope with this burden would have a secondary benefit of easing the load on the general hospital. Since many patients strain the resources there without due justification by means of self-referral, such a practice should therefore only be accepted against a charge, except in cases of injuries, chest pain and loss of consciousness. These measures should be assessed for application sooner rather than later.

As in all other aspects of daily activity, that of general practice has had to adapt from the quiet tempo of the 18th and 19th centuries, to the racing crescendo of the 20th and 21st centuries. It has followed a course of slow evolution running parallel with scientific progress and emancipating public attitudes. The good old days of medicine were never good, either for patient or for doctor. They were just old and relatively quiet. Up to the late 30s, insufficient medical knowledge all round and lack of hygiene contributed to the fatal loss of almost half of the paediatric patients in general practice.

In the local context, some terms were exclusively pre-millennium. A medical professional was "the doctor"; this meant the doctor who looked after everyone's ills and complaints. Such a figure later evolved into what is now referred to as the general practitioner. This term is far more meaningful because it covers such a wide range of medical activities, most of which are accurately perceived in patients' minds, and others which border on the vague. This helps to create a charisma for the general practitioner, which is mutually beneficial for doctor and patient. The term "family practitioner" is more restrictive both in scope and potential ability and in the medical sense suggests a lesser role.

The other medical professionals were "the professors" to whom deeper learning and magical powers were and still are attributed. These were formerly aloof personalities surrounded by an almost sacred aura. Since they were few in number in former years, each could afford to dedicate to himself such a niche. Precisely because they were so awe inspiring, one usually encountered them through the intercession of the general practitioner in "a consultation" or by daring to make an appointment at "his pharmacy". In the early seventies, the attributes of these distinct personalities started to overlap. This came about as a result of the increasing numbers and much better training of both categories and through a leveling off of both the doctors' and the patients' outlook. It may be doubtful if the patient has derived great benefit from this two-way metamorphosis; it has certainly become more expensive for the patient to obtain a medical opinion. The general practitioner's "intercession" has been well conserved in the UK and is called a referral. This is a system to be admired and copied as it keeps events and treatments more orderly. One hopes it will be taken up again in the post millennium order of medicine over here.

The way in which a general practice is run has seen many changes. Up to the early 1900's, a few doctors encountered patients in their own surgery or in a "berga". The "berga" was a room with a desk, examination couch, wash-hand basin and a spirit lamp and test tubes, Fehling solution, acetic acid and some first aid items. There, for one hour a day, a doctor encountered patients. Such rooms usually formed part of the village or town's police station. The doctor would be a DMO – District Medical Officer. He received a government salary for his services and was obliged to offer free service to patients who could not afford it, as proved by a pink form. This was a means test showing they did not possess Lm 1000 in a bank and the value of their property did not exceed that sum. They would have been obliged to take an oath to prove the above. This DMO could also charge those patients who had no pink form. This system was ended in 1977 (at the start of the 10-year medical industrial dispute) and was gradually replaced by the health centres as we know them today. However, up to 1920 no doctor owned a motor car and the bulk of GP work was carried out as home calls. These were done on foot or on a bicycle, and in the outlying areas by means of the patient's horse-drawn cart (tourist class) or by hiring a horse drawn cab (club class) and charging the patient for it. Time was not so

precious. But the doctor enjoyed the reward of unlimited respect, and farm produce would make up the remainder of poor fees. Group practice has not taken off in Malta. Most GPs see themselves as craftsmen in the art of their profession, with a highly individualistic approach of which they are very jealous. There is a high two-way personalized input. This seems to become very diluted and rather impersonal in a team approach as evidence from health centres appears to suggest. In spite of some advantages of this system, the perception is that of a health-servicing centre and, rightly or wrongly, this is anathema to each doctor's individualistic attitude.

Over the last hundred years medicine has seen dramatic changes in the therapeutic field, and as such, so has general practice. Household remedies such as "fidloqqom" (borage) for cough, honey with an alcoholic drink or carob syrup for influenza symptoms and body aches, "xpakkapitra" for renal colic and calculi, the supernatant water of boiled barley for cystitis, were very commonly used. Many such brews have survived into the post millennium. If any of these failed, then one had to resort to the medical man. However, the medical armamentarium was extremely limited, most prescriptions had to be hand-made by a pharmacist or his "compounder" (pharmacy assistant) who kept all his stock-in-trade in bottles or jars. Patent medicines started to gain ground from the 1930s. In the first third of the last century, aspirin was the most widely used remedy in general practice. Soon after, the first chemotherapeutic agent appeared in the form of sulphas. Various other primitive pharmacological preparations were available, most of doubtful value. The real breakthrough to reach general practice happened in the late 1940s when penicillin was discovered. Injections made their first appearance at about that time. One shudders to think how general practitioners managed without NSAIDs, diuretics, so many antibiotics, no ACE inhibitors, no MDIs, no stomach remedies except the water paint like "mistura alkalina".

Preventive medicine as part of primary care was limited to advice to boil milk against undulant fever, tetanus antitoxin administration for soiled wounds and smallpox vaccinations. Latter day doctors have no experience of this, and only the scars on skin/vaccine cream abrasions carried out by means of a sterile needle or "kit pens" seen on the upper arm of today's elderlies are witness to this procedure. The first DTP appeared in the mid-1950s to be followed by a multitude of others. The next breakthrough will probably be a consequence of genetic studies and engineering. When this sort of preventive medicine will reach primary health care level is anybody's guess.

Up to the early 1950s, general practice bedside clinical methods were complemented by just two tests. One was the urinary glucose test, performed by boiling equal parts of urine and Fehling's solution over either a portable spirit lamp or just a ball of cotton wool daubed with Primus stove methylated spirit. The resultant colour change showed how bad the patient's diabetes mellitus was.

Up to 1952 the main therapeutic regime was, as now, dietary, perhaps supplemented by an Italian preparation in drop form named Aglicolo. The breakthrough came in the 1940s with insulin. The first oral hypoglycaenic agent started to be used in about 1950, and came by the name of *Nadisan* (carbutamide) to be followed by tolbutamide and chlorpropamide. These, with education and hygiene have revised the gloomy outlook for diabetics, haunted by carbuncles and foot gangrene but unaware of other complications.

The second most widely used test was the urinary protein test, also performed in the same cooking method by adding, this time, acetic acid in drops. The interpretations and treatments in positive cases were various, but dietary salt and protein restriction were appreciated early on. In the early 1950s GPs were spared the hazards of those messy tests (not uncommonly one would spill the urine and/or the chemical around, or the boiling test tube would pop a bubble and the overlying contents land on something or someone!) by the invention of the urine test sticks.

At first, at least in the rural areas, patients considered these as magic wands, and the hardline sceptics would insist on the boiling test at the risk of one's reputation. We have now reached the other extreme and such tests are now OTC's, along with pregnancy tests. Before the advent of the latter, GPs could only book a guinea pig to be injected by the mother's urine at one of two private laboratories and wait for a few days for the result, as evidenced by the poor animal's ovaries.

This obstetric reflection brings to mind the changes undergone in this field, which was part and parcel of general practice. Early on in the 20th century, the town or village midwife was the supremo. Up to the early 1970s, the patulous perinei and prolapses were abundant evidence of the heroic births (and the large number of them) undertaken by tough mothers and even tougher midwives.

Of course, these adventures took place in the patients' homes. An abnormal presentation of a baby only meant a tougher and more risky job for mother and midwife, who in between contractions would dispense words of encouragement and mighty pushes on the abdomen of the terrified and worn out mother, her fear only compounded by the ominous warning that a doctor may have to give assistance.

From 1950 to the late 1970s progress in better doctor and midwife training and technique and new facilities, made life during labour much less of an ordeal. In the late 1970s, a rapid change of attitude took place. The ever-increasing number of obstetricians and gynaecologists seemed to embark on an educational campaign, the end result of which is that very few GPs attend to patients from conception to birth. The advent of ultrasound and labour monitoring did their bit as part of the great scientific progress to zero out all home deliveries which often involved the tricky use of forceps. Another reason for this change has been the appreciation of the value of Caesarean Sections, and the safety on all counts of hospital deliveries. Well trained midwives manage the bulk of hospital deliveries in an environment of safety monitoring with specialist standby for mother and newborn, a situation which is a far cry from the anguish and risk associated with the domiciliary practice of earlier years. GPs may console themselves for the loss of general practice midwifery by the increasing turnover in geriatrics.

Medicine in the pre-millennium has had to contend with the worst scourges – besides wars – affecting humanity, the most notorious being plague and tuberculosis, cancer and Aids. Microbiology, in particular the discovery of M. Lepre by Hansen in 1874 and by Koch of M. Tuberculosis in 1882, has been the science responsible for dealing with the first two. Though not exactly a bedside aid, yet its application has its place there as well.

The problems of cancer and Aids have overflowed into the post-millennium. One hopes that a combination of electronic and genetic sciences will deal the final blow to these two diseases. Just as the former two instilled a phobia in the lay and medical world, the latter two still do. However, the present medical fraternity is better equipped through awareness and the multitude of diagnostic aids within the fields of biochemistry and imaging.

Unfortunately, other dangers of medical import lurk in the shadows of the new millennium, and the front-line medical teams will meet them head-on. Most worrying are the effects of chemical, bacteriological and radioactive accidents or outright war. Health is seriously at risk from the ozone hole, air, sea and water pollution, and possibly electromagnetic waves, genetically modified foods, and the effect on mental health of various environmental factors.

Doctors do keep their feet on the ground, but some medical Nostradamus-like notions lurk at the back of their minds. What else would the crystal ball show for the new millennium? Surely, a mind-boggling picture. Moral and ethical dilemmas will hound us as we move along at an ever-accelerating pace in scientific progress, be it in the sphere of prevention, diagnosis or treatment. All of which is bound to be intimately related to the recent mapping of the human genome. This could possibly lead to rendering the present bewildering armamentarium of medication as being, at best, of limited use. When sophisticated enough, much of that technology may find bedside application. Who would ever have dreamt of the compact ECG and glucose meter a century ago? Electronic devices in computing and telemetry, combined with complex biochemical tests will most likely become commonplace.

This may eventually result in cutting down patient encounters. The manner in which the patient reacts to all this style of change might well force the clock backward. The weight of all these eventual changes may mean more months of undergraduate training, in turn possibly leading to an erosion of the line of demarcation between some of the specialities and primary health care. Some British medical schools have already extended the medical course from 5 to 6 years.

General practitioners, unlike the majority of their colleagues visit homes. This is where patients expose their most intimate selves, especially at the bedside. There they realise that patients, besides having faith in the doctors, also have faith in matters spiritual. Suspecting that they may have to share the merit of a successful outcome, doctors may be put off. Those who are not, will probably be more at peace with themselves.