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Maltese Family Doctor

It-Tabib tal-Familja

A peer-reviewed journal of the Malta College of Family Doctors

VOLUME 16 - ISSUE 02 DECEMBER 2007

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The mission of the Maltese Family Doctor is to deliver accurate, relevant and inspiring research, continued medical education and debate in family medicine with the aim of encouraging improved patient care through academic development of the discipline. As the main official publication of the Malta College of Family Doctors, the Maltese Family Doctor strives to achieve its role to disseminate information on the objectives and activities of the College.

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Malta College of Family Doctors
PO Box 69, Gzira, GZR 1000

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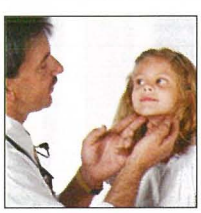

Is Family Medicine a Specialty?

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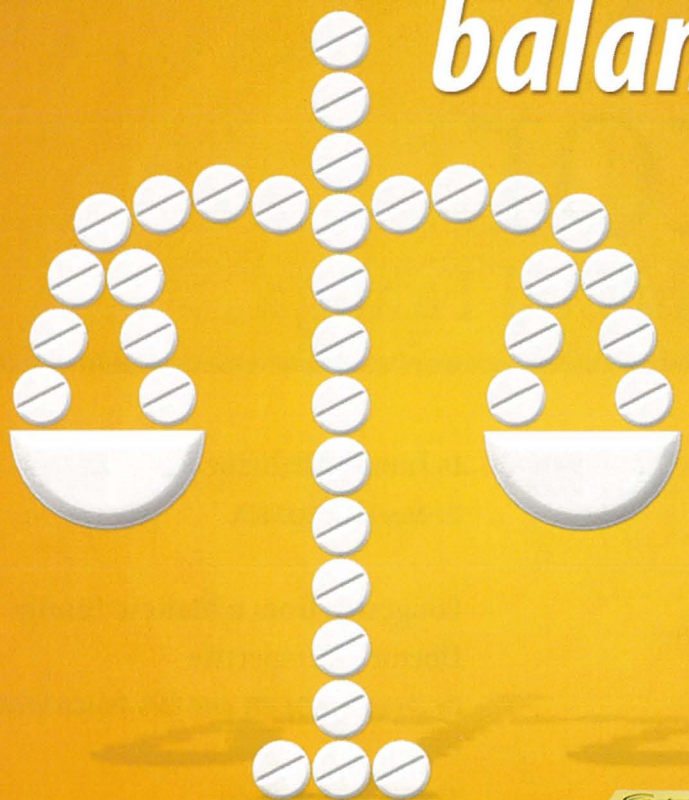

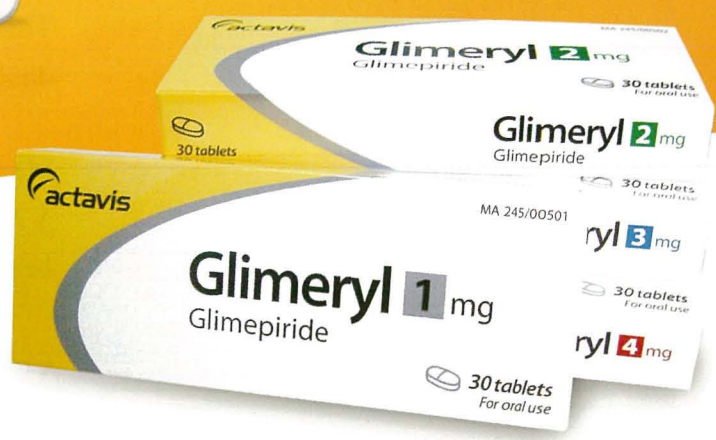

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In patients not adequately controlled with the maximum daily dose of Glimeryl, concomitant insulin therapy may be initiated if necessary. While maintaining the glimepiride dose, insulin treatment is started at low dose and titrated up depending on the desired level of metabolic control. It is recommended that this dose be taken shortly before or during a substantial breakfast. If no breakfast is taken, the dose should be taken shortly before or during the first main meal. During the course of treatment, there is an improvement in the control of diabetes due to higher insulin sensitivity. Thus, glimepiride requirements may fall. To avoid hypoglycaemia, timely dose reduction or cessation of therapy must therefore be considered. Change in dosage may especially be necessary, if there are changes in the weight or life style of the patient, or other factors that contribute to the risk of hypo-or hyperglycaemia. **Contraindications:** Insulin dependent diabetes, diabetic coma, ketoacidosis, severe renal and hepatic disease, known hypersensitivity to glimepiride, other sulphonylureas or other sulphonamides or hypersensitivity to any of the excipients in the tablet. **Special warnings and precautions for use:** When meals are taken at irregular hours and especially if meals are omitted, treatment with Glimeryl may lead to hypoglycaemia. Treatment with Glimeryl requires regular monitoring of glucose levels in blood and urine. In addition, determination of the amount of glycosylated haemoglobin is recommended. Regular haematological monitoring (especially leucocytes and thrombocytes) and hepatic monitoring are required during treatment with Glimeryl. 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Concomitant administration of the following medicines may enhance the hypoglycaemic effect of glimepiride: phenylbutazone, azapropazone and oxyfenbutazone, sulphinpyrazone, insulin and oral antidiabetics, certain long acting sulphonamides, metformin, tetracyclines, salicylates and p - amino- salicylic acid, MAO – inhibitors, anabolic steroids and male sex hormones, quinolones, chloramphenicol, probenecid, coumarin anticoagulants, miconazole, phenfluramine, pentoxifylline (high parenteral doses) fibrates, tritoqualine, ACE inhibitors, fluconazole, fluoxetine, allopurinol, sympatholytics cyclo-, tro- and iphosphamides. The hypoglycaemic effect of glimepiride is reduced thereby resulting in a reduced metabolic control if Glimeryl is administered concurrently with other medicines containing the following active ingredients: oestrogens and progestagens, saluretics, thiazide diuretics, thyroid stimulating agents, glucocorticoids, phenothiazine derivatives, chlorpromazine, adrenaline and sympathicomimetics, nicotinic acid (high doses) and nicotinic acid derivatives, laxatives (long term use), phenytoin, diazoxide, glucagon, barbiturates and rifampicin, acetozolamide. H_2 antagonists, beta-blockers, clonidine and reserpine may either enhance or weaken the blood glucose- lowering effect. During treatment with sympatholytic drugs such as beta-blockers, clonidine, guanethidine and reserpine, the signs of adrenergic counter regulation to hypoglycaemia may be reduced or absent. Alcohol intake may potentiate or weaken the hypoglycaemic action of glimepiride in an unpredictable fashion. Glimepiride may either potentiate or weaken the effects of coumarin derivatives. **Pregnancy and lactation:** Pregnancy: Abnormal blood glucose levels during pregnancy are associated with a higher incidence of congenital abnormalities and perinatal mortality. So the blood glucose level must be closely monitored during pregnancy in order to avoid the teratogenic risk. The use of insulin is required under such circumstances. There are no adequate data detailing the use of glimepiride in pregnant women. Animal studies have shown reproductive toxicity which was probably related to the pharmacologic action (hypoglycaemia) of glimepiride. Consequently, glimepiride should not be used throughout pregnancy. If a patient plans to become pregnant or if a pregnancy is detected during treatment with glimepiride, the treatment should be switched as soon as possible to insulin therapy. Lactation: It is unknown whether the drug is excreted in human milk. Glimepiride is excreted in rat milk. 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Rare (>1/10.000 and <1/1.000):* Changes in the blood picture, including: moderate to severe thrombocytopenia, leukopenia, erythrocytopenia, granulocytopenia, agranulocytosis, haemolytic anaemia, pancytopenia, increased hepatic enzymes. *Very rare (<1/10.000, incl. isolated reports):* Mild hypersensitivity reactions may develop to severe reactions with dyspnoea, fall in blood pressure and possibly shock, allergic vasculitis, cross allergy with sulfunylureas, sulphonamide and related substances, hypoglycaemic reactions, gastrointestinal discomforts such as nausea, vomiting, diarrhoea, epigastric pressure or fullness and abdominal pain, hepatic impairment e.g. with cholestasis and icterus, hepatitis, photosensitivity, drop in serum sodium. **Marketing Authorisation Holder:** Actavis Ltd. B16, Bulebel Industrial Estate Zejtun, ZTN 08 Malta.

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Is Family Medicine a Specialty?

Dr Noel CARUANA

What really happens on the frontline, at the grass root level, will not change despite arguments for or against family medicine. Family doctors will remain first-contact doctors and still provide most of the care for most people across Malta and Gozo.

It is hoped by many, though not all, that acknowledging family medicine as a specialty will enhance its image in Malta. In many countries however, family medicine recognition as a specialty has not had impressive results. In Britain the incomes of general practitioners are competitive with those of hospital consultants and the government recognises the importance of general practitioners. This has resulted in a successful and stable UK general practice.

On the other hand, in the US, since family medicine was declared a board specialty the proportion of residents in family medicine has fallen. It can be argued given the above, that a strong specialty depends on policy maker's recognition and a just remuneration for service given. We all know (or do we?) the story in our country...

Defining a specialty by its limitations is not really a valid way to differentiate family medicine from other disciplines. The reality is that today other specialties view themselves as very broad in their scope of knowledge required and are increasingly embracing generalism. Rather than relegating family medicine to the sidelines in this expanding generalistic sphere, there is an opportunity today, to project our speciality to the forefront where it can lead others as the specialty with the greatest expertise in generalism.

What really happens on the frontline, at the grass root level, will not change despite arguments for or against family medicine. Family doctors will remain first-contact doctors and still provide most of the care for most people across Malta and Gozo. What will change is how the specialty and its members are viewed and respected. Calling family medicine a specialty without addressing the real causes of its poor image will not make any difference. The real causes are non competitive incomes – (a problem that will only be remedied when our organisations honour their obligation to us and truly negotiate a just fee schedule), a lack of career progression to senior registrar and consultant levels for family doctors working in the state GP service, and the fact that colleagues and health administrators and even some of our own accept put-downs of family medicine without even the slightest challenge.

In his essay "Family medicine's identity: Being generalists in a specialist culture?"[1] Howard F Stein emphasizes that whereas when family medicine came to be, family medicine was a pure generalistic discipline, today specialisation is quite simply a part of our cultural ethos. Thus in this setting one can be both a generalist and a specialist. It is because the public recognises our value and also because research abroad has shown that countries with stronger primary health care have better health outcomes[2], that we must move on as the central generalist and lobby more in the medical system strategic planning. In November 2007 the Department of health called a one day seminar with the intent of designing the future of primary health care in Malta. This comes at a very late stage but better very late than never. The Association of Private Family

Doctors, the Association of General Practitioners, representing doctors working in Health Centres and the Malta College of Family Doctors have formed a Working Group on Primary Care Reform specifically to give our input in our area of expertise. Family Doctors are united in claiming the right to be involved early on and in expecting that no negotiations on areas affecting doctors working in primary care, be held with any other body without involving this Working group.

Primary care has been acknowledged as an important point of contact for people experiencing mental health difficulties. The Autumn CPD meeting last November was dedicated to mental health issues in general practice. An important part of primary mental health care will be the capacity for general practitioners to work collaboratively with psychiatrists and other health professionals such as psychologists and social workers. It is augured that this one day seminar will serve as a catalyst for further development.

Dr Noel CARUANA MD MSc MMCFD

Specialist Family Doctor,
Editor, Maltese Family Doctor
Honorary Secretary, Malta College of Family Doctors

Email: noelcaruana@gmail.com

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1. Stein HF. Family Medicine's identity": being generalists in a specialist culture? Ann Fam Med 2006; 4(5): 455-9.

2. Starfield B. Is primary care essential? Lancet 1994; 344: 1129-33.

Longevity, from a Maltese Family Doctor's Perspective

Dr Jean K SOLER and Mrs Paula WALLS

This article is largely derived from an assignment submitted in March 2005 by the first author as part of a Masters in Primary Care and General Practice near the University of Ulster in Northern Ireland. The essay was written for the purposes of summative assessment of the module on "Primary Care Concepts and Principles" led by Mrs. Paula Walls. The assignment question was: "Consider how increased longevity has affected disease patterns and what effect this is likely to have on your practice in the next decade. Compare and contrast your thoughts with your fellow students. Can you identify any patterns?"

Introduction

People around the world are living longer at a time when, in contrast, birth rates tend to fall. Worldwide there are some 600 million aged 60 and over, this number being expected to double by 2025 (WHO, 2004). The implications of this phenomenon are well recognised by the World Health Organisation (2004) which cites the improvements in health resulting in increased longevity, and increasing health care needs coupled with population and demographic change as a health care priority. This article will consider the impact of longevity and assess its impact for the family doctor in Malta.

Background

Loudon et al (1998), reflecting on past changes in UK general practice, reproduce a table of disease patterns from 1950 to the mid 1990's. They point out that some disorders have become commoner due to increasing longevity, such as osteoarthritis, Alzheimer's disease, some cancers, heart disease and Parkinson's disease. It seems evident that the number of co-morbid diseases also increases sharply with age (van den Akker, 1999, Wilson et al, 1962, Metsemakers et al, 1993). Population ageing will thus lead to increasing multiple morbidities and multiple treatments.

It is anticipated that the burden of disability and social problems will increase exponentially as populations age. Social problems may be compounded by a shift in the balance between productive workers and dependent pensioners, additionally challenging equity in health care delivery as the rapidity of population ageing outpaces social and economic development in developing countries.

Developing countries will become old before they become rich while industrialized countries became rich while they were growing old. (World Health Organisation, 2004)

The implications of longevity for family medicine in Malta

The Maltese situation appears to mirror international trends with increases in chronic diseases, multi-morbidity, disabilities and social problems. Diseases that are more prevalent locally in older age groups, such as diabetes mellitus type II and dementia, would also be expected to increase in prevalence (WHO, 2004).

Local morbidity data could be useful to explore the phenomenon. Since 2000 the author has been collecting data from the electronic patient records of Maltese Family Doctors who use the International Classification of Primary Care (Hofmans-Okkes and Lamberts, 1996) to code all elements of their contacts with patients, including diagnoses and interventions (Soler and Okkes, 2004). On comparing morbidity between age groups, one can see that the distributions of diagnostic titles are markedly different. In the elderly (Table 1), the general (A), cardiovascular (K), respiratory (R) and musculoskeletal (L) conditions predominate, whilst in the overall distribution (Table 2) the respiratory diagnoses dominate, followed by general and then digestive (D) diagnostic titles. If these trends are representative, one can predict a significant shift in local morbidity patterns away from acute (and often infective) generalised, gastrointestinal or respiratory illness, towards more chronic and degenerative disease (data on file not tabulated) as the population ages (Soler, 2005).

Malta's population is still relatively young by European standards, but is expected to age significantly in the short term. Graph 1 shows the population distribution in 2003 compared with 20 years previously. Growth is expected to continue, and whilst in 2004 the age group 65+ counted 21,700 male and 30,300 female members, in 2015 these numbers are expected to increase by over 30% to 28,400 and 39,800 respectively (Demographic Review 2003, 2004, p ix, 15).

Local national policies are based on the World Health Organisation European region "Health for all" policy document "Health 21", which can then be taken as an appropriate local and international standard. Its target 5 "Healthy ageing" recommends that:

"by the year 2020, people over 65 years of age should have the opportunity of enjoying their full health potential, and playing an active social role." (World Health Organisation, 1999)

The document (Box 1) recommends specific actions and defines measurable outcomes regarding achievement of this target. The focus is on optimising functional status and retaining inherent capacities through facilitative national policies and development of accessible needs-based services within communities. Health promotion and preservation are central elements of this drive (World Health Organisation, 1999).

Meeting the needs of an ageing population with respect to the "Health21" document therefore pressures the primary health care (PHC) provider to act as patient advocate to pressure government, local councils, community groups and social services, directly and through professional associations, to initiate the recommended changes (WHO, 1999). PHC providers should also act at the individual patient level, actively promoting healthy lifestyles and performing interventions to prevent disease and preserve health. Practices should introduce evidence based screening programmes, piloted needs-assessment instruments and pro-active prevention and management strategies for chronic diseases (Strauss et al, 2005).

Critics of PHC may argue in favour of secondary or tertiary models of care to address the problem with advanced technologies or disease-centred strategies. However, increasing multi-morbidity is best addressed in PHC (WHO, 1999). Patient management in primary care, oriented towards patients' overall health care needs, emerges as a more promising strategy than care oriented to individual diseases (Starfield et al, 2003). PHC should be lobbying for increased resources using international and local research evidence.

"...older people encounter many barriers to care." (World Health Organisation, 2004)

PHC has a responsibility to offer affordable and accessible care, being sensitive in pricing strategies and actively identifying and removing barriers (Dowling and Glendinning, 2003). Practical examples include the local practice of same day home visits and drop-in systems for GP services. More work is needed to improve access to services such as occupational therapy, physiotherapy, speech therapy and professional counselling, and to independent outreach services such as free meals at home, home nursing, free handyman service, etc. With the increasing burden of restricted mobility and disability, extended families will find their resources stretched with increasing demand due to population ageing. Carers may not cope, and ways will have to be found to support them with specific outreach and relief services (WHO, 2004).

Mortality and morbidity indicators are also mentioned in "Health21" as means to assess target achievement. Local projects such as the Maltese Transition project (Soler and Okkes, 2004) exemplify how PHC can participate or lead in research, and provide accurate community based morbidity indicators that can be used at local and national levels.

The skew in the proportion of productive workers per pensioner may generate social inequalities and possibly limit the national budgets available for health care. This could create tensions in the equity of health delivery. Would productive workers be prioritised over pensioners? Regardless, health at the workplace should be a priority for our practice to preserve health and support economic growth.

Another important factor will be the increased patient-doctor contact time, and increasing costs of prescribing. Once can see from table 3 that Maltese elderly consult nearly twice as much as the 25-44's, and in table 4 one can see the markedly increased quantity of standard daily doses of drugs prescribed. In one Scandinavian study, 1/4 to 1/3 of the population in the oldest age groups visited their general practitioner in a 4-week period (Grimsmo et al, 2001).

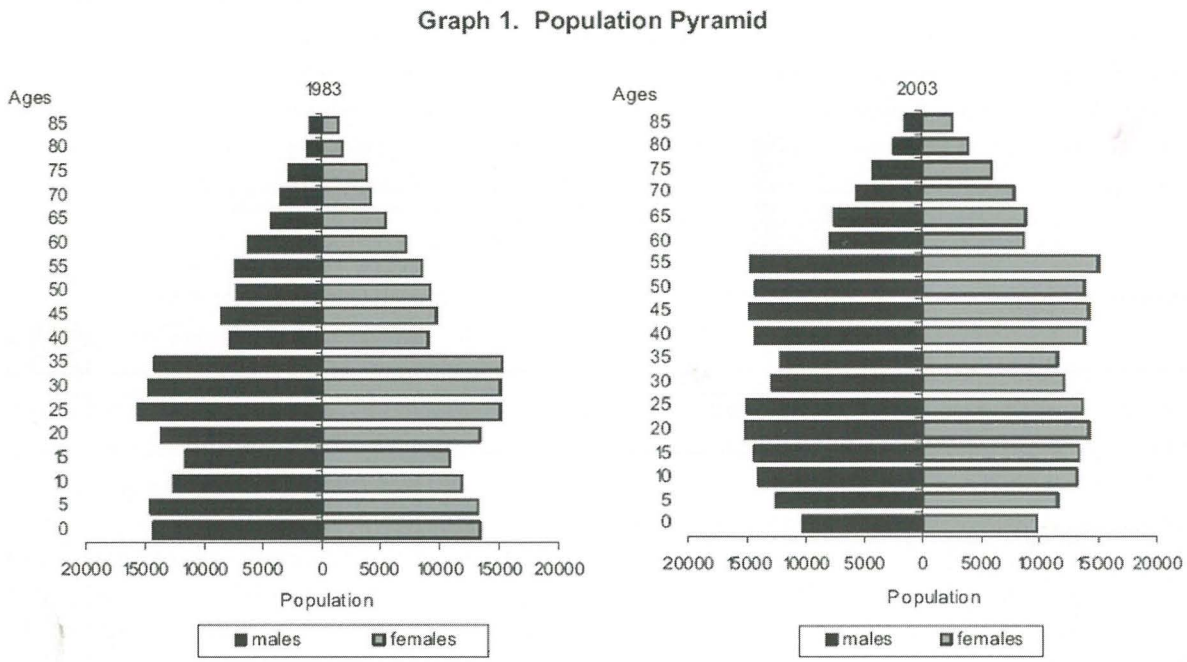
Similar thoughts and concerns were expressed during structured discussions by the first author's fellow Maltese and European students in a recent University of Ulster MSc in General Practice and Primary Care in 2005. Based on their experiences as family doctors in primary care, most agreed that changes in disease patterns and health, changing needs and increasing expectations and demands, are causing a situation to develop where resources are skewed against demand, and their availability is limited. Traditional family and community networks are stretched by these tensions, and a real threat to equity, accessibility and sustainability of current health care models exists. New, long-term, pro-active and health preserving approaches are needed, and future PHC providers have to be more sensitive to needs and more cost-effective. Some students pointed out that this situation would put PHC providers in increasingly untenable situations of incrementing workload but potentially less remuneration, whilst others expressed novel ideas such as incentives for GPs not to retire, or providing a specifically "elderly-friendly" service.

Conclusion

Longevity is a modern day phenomenon which, as discussed above, presents a huge challenge for the caring services, in particular for primary care. It seems apparent that family medicine will play a central role in rising to the challenges as complex as: dwindling resources, managing equity, increasing workload, increasing chronic non-communicable disease, spiralling multi-morbidity, and higher priority for preventive measures to preserve disability-free life expectancy. No panacea or blue print is readily available, but what is apparent from primary care models emerging elsewhere is the need to: i) directly increase patient involvement in their care, ii) work inter-sectorally to share and manage finite resources to meet identified needs, and iii) for further research to design, monitor and evaluate systems and services in order to respond to the burgeoning needs associated with longevity.

Appendices

Graph 1. Maltese population pyramid, 1983 and 2003. (Demographic Review 2003, 2004, p v)



1. Tables and figures

Table 1. Distribution of diagnostic titles within episodes of care clustered by ICPC chapter, 65+ (X Axis). Rates expressed as episodes per 1000 patient years (Y axis). (Soler, 2005).

ICPC Chapters: A – general; B - blood, immune system; D – digestive; F – eye; H - ear (hearing); K – circulatory; L – musculoskeletal; N – neurological; P – psychological; R – respiratory; S – skin; T - metabolic, endocrine; U – urological; W - women's health, pregnancy, family planning; X - female genital; Y - male genital; Z - social problems

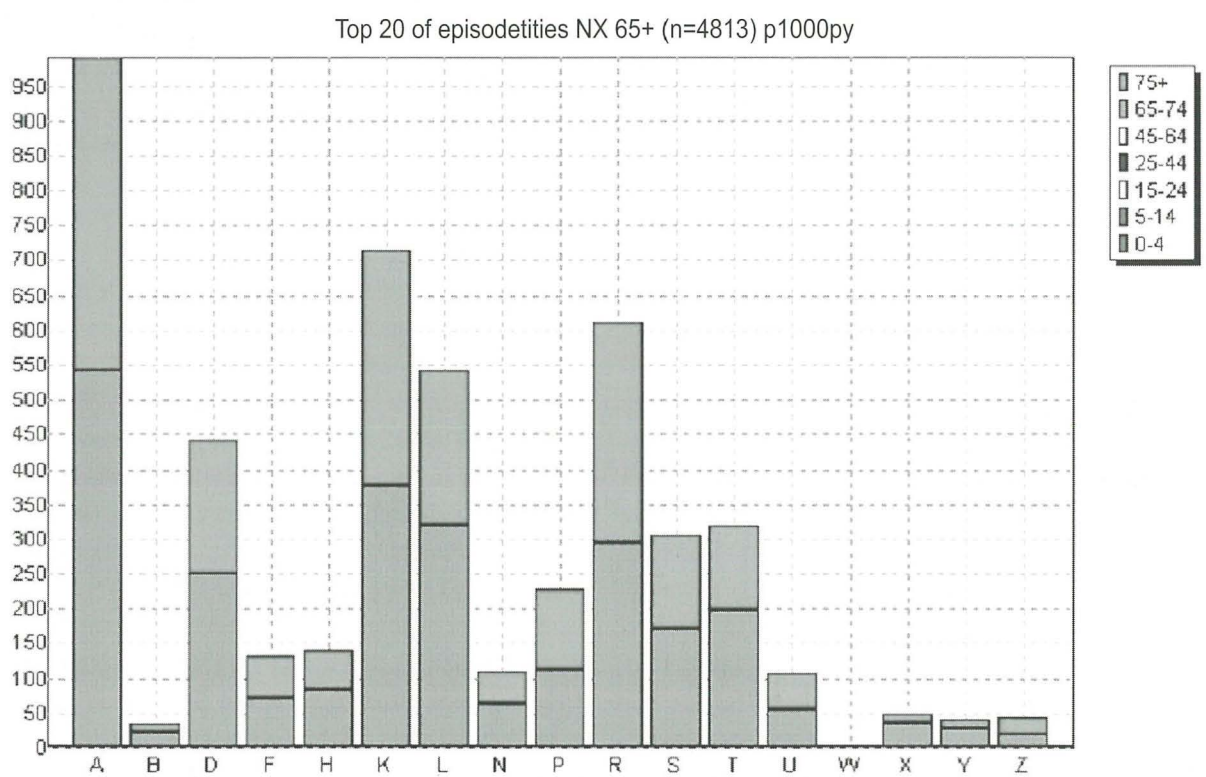


Table 2. Distribution of diagnostic titles within episodes of care clustered by ICPC chapter, all age groups (X axis). Rates expressed as episodes per 1000 patient years (Y axis). (Soler, 2005)

ICPC Chapters: A – general; B - blood, immune system; D – digestive; F – eye; H - ear (hearing); K – circulatory; L – musculoskeletal; N – neurological; P – psychological; R – respiratory; S – skin; T - metabolic, endocrine; U – urological; W - women's health, pregnancy, family planning; X - female genital; Y - male genital; Z - social problems

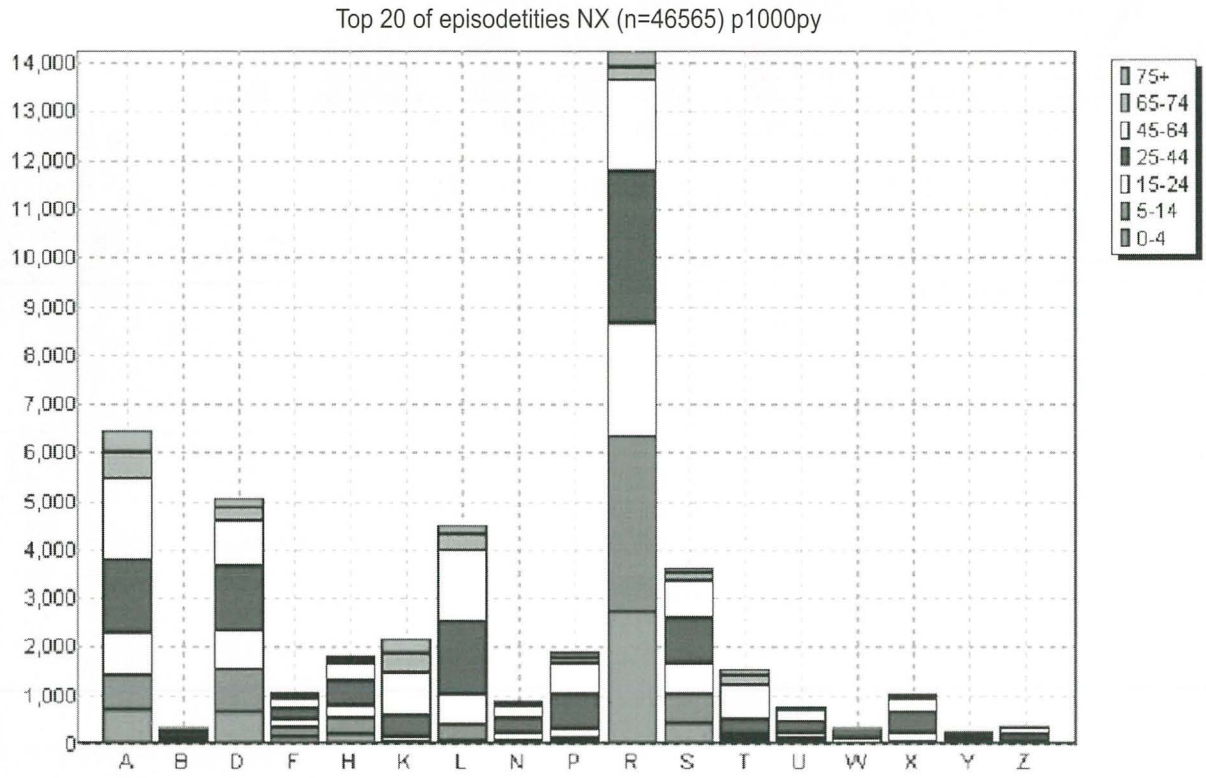


Table 3. Distribution of consultations per patient per year (X axis) by age and sex (Y axis). (Soler, 2005)

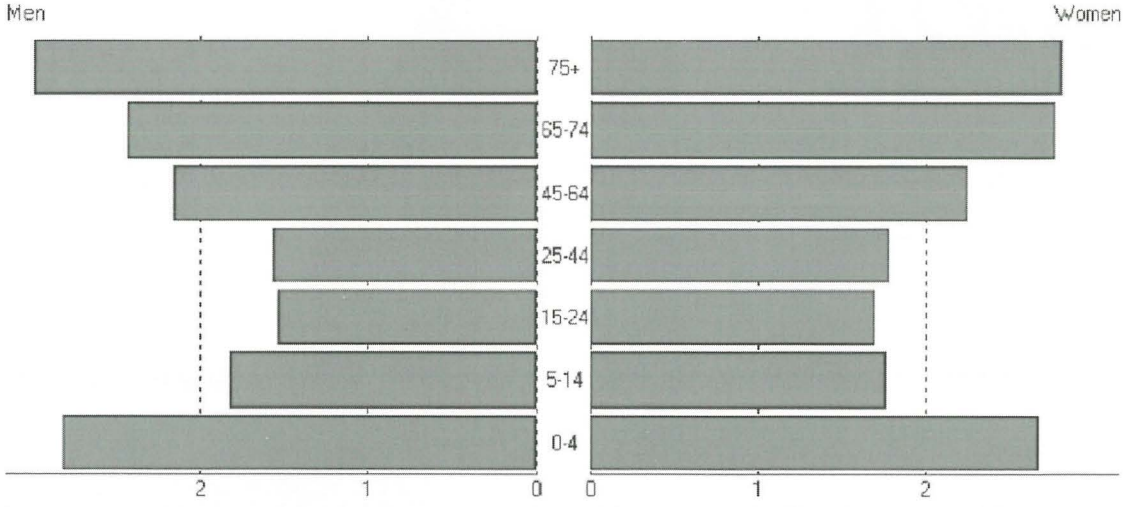
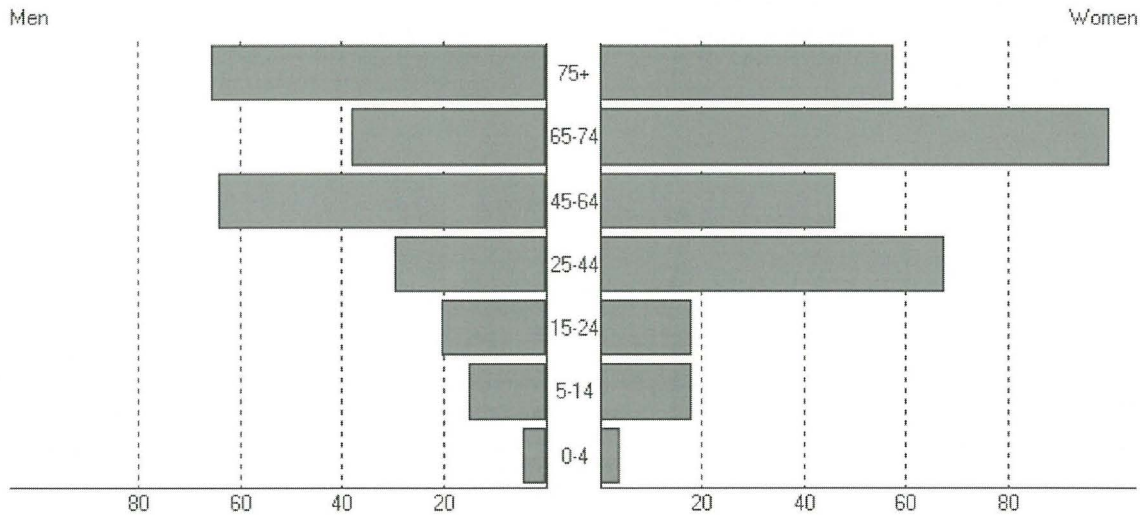


Table 4. Sex-age (Y axis) distribution of prescribed defined doses (WHO 2001) of medication per patient year (X axis) standardised for Maltese population in 2002. (Soler, 2005)



Box 1. "Health21" policy document Target 5 – "Healthy Ageing". Summary taken from Annex 2. (World Health Organisation, 1999)

By the year 2020, people over 65 years should have the opportunity of enjoying their full health potential and playing an active social role.

In particular:

5.1 there should be an increase of at least 20% in life expectancy and disability-free life expectancy at age 65 years;

5.2 there should be an increase of at least 50% in the proportion of people at age 80 years enjoying a level of health in a home environment that permits them to maintain autonomy, self-esteem and their place in society.

This target can be achieved if:

- public policies including those related to housing, income and other measures that enhance people's autonomy and social productivity, take full account of the needs and views of older people;
- health policies prepare for healthy ageing through health promotion and protection at earlier ages;
- health and social services at community level support the elderly in their everyday lives according to their needs and views, reach out to them and help them to become more active and to help themselves;
- each community develops programmes that coordinate, monitor and evaluate the services available to the elderly and ensures that sufficient resources are available for this task;
- policies allow older people to use the capacities remaining to them and provide access to appropriate care, outreach services, appliances and social support.

Suggested areas for formulating indicators:

- Mortality indicators related to appropriate age groups and causes of death
- Available statistics on morbidity and disability among the elderly

Dr. Jean K SOLER and Mrs. Paula WALLS

Corresponding author: Dr. Jean K Soler MD
Josephine, St. Catherine Street, Attard, Malta

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M F D CORRESPONDENCE email: journalmfd@yahoo.com

The Long Twilight

Dr Jason BONNICI

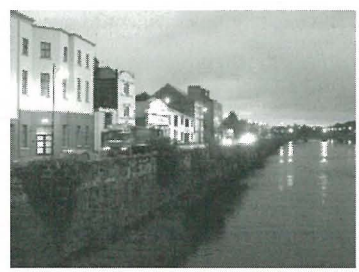
This is my personal reflection on a study visit in County Mayo, Ireland, in October 2007. The study visit was made possible by a Leonardo da Vinci Mobility Fund project under the Life-long Education program of the European Commission. The idea of the study visit materialized when a group of family doctors from the Mayo Faculty of the Irish College of Family Doctors met in Malta in April 2007, and they took the opportunity to have information sharing sessions with the Malta College of Family Doctors and individually visited a number of surgeries. My sincere thanks goes to Dr Scott Walkin and Patricia Kiernan, and to Dr Diarmuid Murray and his family, for their friendliness and for making my study visit both possible and enjoyable, as well as to Dr Pat Durcan, Dr Eleanor Fitzgerald and all their staff and colleagues.

On that day Dr Scott Walkin and myself left cosy Ballina, on the west coast of Ireland, at 06.30 hours, and plunged into an ominous twilight headed towards the east coast. As we raced towards lively Dublin in the dim light, the fidgety Moy river skirted through lush fields dotted with the pride of Irish beef, yellow ashes and dark willows fleeted past us along the country roads, the Ox and Nephin mountains shouldered above us, and radiation fog hanged from the branches of the birches at the sides of the motorways. Three hours later we were still immersed in the dim of the Irish twilight as we stalled over and over again in the traffic jams creeping into the capital.

Later on, the day brightly picked itself up and we finally joined the Assistant Program Directors and General Practice Trainers of the distinct General Practice training schemes who were enthusiastically filling up the reception area of the conference center.

Eire is endowed with an amazingly long twilight, and our colleagues on the Emerald Isle had their fair share of it, but indeed life, career and general practice is bright nowadays in comparison.

Moyview Family Practice Ballina, co. Mayo



River Moy and Ballina Town, co. Mayo

Introduction

For sure family doctors are busy people wherever I have been to, and the clinics of Moyview Family Practice in Ballina, Deel Medical Centre in Crossmolina, Knock Medical Centre in Knock and Dr Murray's Surgery in Ballyhaunas are witness of the universality of the professional life of a family doctor.

What did struck me though was that the workload is orderly and organised - the service is oriented in particular towards **the provision of preventive medicine and screening services**, while at the same time reactive medicine and walking in cases are catered for.

I would say that this is due in a good part to **the widespread availability of group practice set-ups and the structure of the practices themselves** - the relatively larger practices consist of practice partners and registrars, a practice nurse, practice secretaries, a practice administrator and a practice manager, and the relatively smaller practices are made up of practice partners, registrars, nurse and secretary. Another chunk of the equation is made by **the support and packages facilitated by the Health Service Executive (the national health scheme)**. Additionally **the role of the Irish College of General Practicioners** is invaluable in terms of the provision of clinical protocols and guidelines to practices, continued medical education activities and publications, and General Practice training schemes. As regards quality of life a main asset was the setting up about five years previously of **WestDoc, a cooperative to provide for out-of-hours services at a local and regional level.**

Primary Health Care

During the presentations done by Mayo Faculty in Malta in April 2007 I had noticed with interest how in the last two decades, solo general practicioners had dwindled in Eire (presently 20%, mostly in rural communities), to be replaced by group practices (presently 80%, of varying sizes).

This was because **policy makers of the Irish national health authorities** realized that group practices offer a more comprehensive medical cover, better quality of service, further adherence to national targets and a platform for training, while at the same time allowing for audit and research. This realization was complemented by **various grant schemes**, for example for setting up surgeries catered for a group practice set-up, for clinic equipment, and for employing and training practice staff, by **a capitation system** and by **a national screening and health promotion packages**.

There is **only one tier of medical service in primary health care**, centred around the General Practicioner surgery. **The family doctors cater for both government-sponsored and private patients**. Government-sponsored patients are those patients whose medical services and medicine costs are covered by Government. In this scheme government pays an annual fixed capitation per patient to one group practice to cover all the consultations and home visits that the patient may need. The patient is then bound to use the services of this one group practice to be eligible for medical services.

Private patients pay a fee per service. The ratio of government: private patients varies among the localities.

General Practicioners' surgeries are **also the place where national health promotion programs, national health screening programs and national vaccination schedules** are implemented and government pays both for the material used and the consultation for both private and government-sponsored patients.

The Group Practices

The front-line in the organization of the daily work at the surgeries starts with the **secretaries**. They set appointments, manage them according to doctors' availability and filter calls. The system allows for most of the consultations to be via an appointment while catering for walk-ins. Home visits are reduced to a manageable minimum.

The appointment system allows internal communication between doctors inside the clinics, the practice nurse in her clinic and the secretaries at the front desk. Different practices use different programs, but the properties are similar to all the programs I saw.

Amongst them is the possibility for discharge letters, results from medical laboratories, radiology departments and pathology laboratories and other communication between medical services to be scanned and posted directly onto the medical records. What I was impressed mostly about is not so much that such an attachment is possible, as this is technically feasible and its use is predictable, but rather that there is first of all **regular communication between equals (consultants and registrars in hospital specialties writing to specialists in family medicine and General Practice registrars in the community, and vice-versa)** and secondarily that **the communication given is precise, useful and practical with a management plan.**

Repeat prescriptions under the Health Service Executive schemes are left with the secretary. The Medical Records of a patient are updated regularly and contain the list of medications. These are printed at the touch of a keyboard button onto specific prescription forms fed into a specifically designed printer. The secretary fills in the forms and gives to the caring doctor to sign.

The secretaries liaise with the practice nurse and practice doctors to call patients due for their vaccinations (kids and adults), appointments for specified medical check-ups, like diabetics, patients who underwent coronary interventions and asthmatics, and recall for screening campaigns.

Much of the latter work is in the realm of the practice nurse and most of the patients from these categories are fully managed by the practice nurse. The terms of reference of a practice nurse is really vast and the practice nurse's clinic is kept busy - once I spent time getting to know what happens in the practice nurse's clinic I could understand why I had been repeatedly told that **the next step for improving the quality and service of an established surgery is to employ a practice nurse.**

The practice doctor is fully focused on problem cases and patient-prompted consultations. Patients are given a reasonable 15-minute for a single consultation. The family doctors are individually interested in different areas of general practice and liaise as needed amongst them and with the practice nurse to run **specialized clinics.** National clinical guidelines and protocols are adhered to within the group practices. I noticed with pleasure that all the surgeries I visited are mercury-free, with digital thermometers and sphygmomanometers being used exclusively to decrease exposure, especially in children, from possible spills and leakages to this hazardous neurotoxin.

All this set up is backed up by the **practice administrator**, who delves through the different patient schemes and packages, and the **practice manager**, who runs the practice on a day-to-day basis.

Dr. Murray's Surgery
Ballyhaunas, co. Mayo

Deel Medical Centre
Crossmolina, co. Mayo

WestDoc Centre
Knock, co. Mayo

Knock Medical Centre
Knock, co. Mayo

Out-of-Hours Services

In County Mayo, the **out-of-hours services are organised by WestDoc, a cooperative of doctors**. WestDoc started its activities in 2002 and it is growing fast as more doctors are enrolling to share the out-of-hours service. I attended the Annual General Meeting of WestDoc in Knock during the study visit.

County Mayo is divided into a number of localities with similar distances for General Practice cover per doctor involved in the out-of-hours service.

The out-of-hours services are made up of a rota of registered General Practicioners covering 6pm to midnight during weekdays and 10am – 6pm Saturdays and Sundays, and of locum doctors to cover the appropriately named 'Red Eye' Clinics, that is midnight to 8am during weekdays and 6pm to 10am weekends.

All out-of-hour activities are managed by a call centre in Galway, a town on the west coast of Eire, and the service is by appointment only for both clinic visits and house calls. A number of WestDoc nurses triage the calls.

There are a number of WestDoc clinics in the county from which the doctor on call services with the assistance of a practice nurse and an ambulance driver. **At the end of the consultation or home visit the WestDoc doctor gives a feedback sheet via fax to the caring General Practicioner of the patient seen**.

Continued Medical Education Meetings

I also took the opportunity to attend the first Continued Medical Education (CME) meetings of the new academic year in County Mayo. The region is divided into four different groups and each General Practicioner is affiliated to a group. Some of the groups, meaning the participating General Practicioners, have been meeting every month for the last 20 years!

The CME program is run by a General Practice Trainer per group, who is contracted by the Department of Health and trained by the Irish College of Family Doctors.

In each of the four group meetings I attended (Ballina, Claremorris, Swinford and Westport), the General Practice trainer facilitated the CME program for the next months in a bottom-up approach, actively looking for what each group of family doctors perceive as educational needs.

Apart from the educational content of the meeting, the group offers a medium for both professional and social support; in fact some of the time dedicated for the meeting is specifically for problem cases and for socializing. And I have the impression that it is these latter aspects of the CME meetings that made it so popular as to last in the same format for a good 20 years.

General Practice Training Schemes

Another term of reference for the project was to observe and learn about General Practice Training Schemes. In fact, as hinted earlier on, I had the opportunity to attend **the meeting of National Assistant Program Directors** in Dublin. Here, the Assistant Program Directors and the General Practice Trainers of the different General Practice training schemes had come from their practices and programs for one of their national conferences. They shared new and good ideas, provided and attended workshops, supported each other, socialized as peers and colleagues and inevitably met for business meetings too.

Additionally I attended the Full-Day Release Course of the General Practice Registrars and the Half-Day Release Course of the General Practice Trainees in **the General Practice Training Scheme of Galway** and the mid-week sessions of **the General Practice Training Scheme of Sligo**. In these activities the medical doctors training as family doctors while in the hospital attachments for two years (General Practice Trainees) and the medical doctors training as family doctors while in the General Practice attachments for a subsequent two years (General Practice Registrars) meet once a week for tutorials, case presentations, article reviews and problem cases for discussion.

Conclusion

I am prepared to share more details from the above study visit to interested groups and am looking forward to further opportunities for cooperation and support between Irish and Maltese family doctors.

Jason BONNICI MD MMCFD DFP(MCFD)

St James gp group practice

Email: gpgroup@stjameshospital.com

Man and the Pageant of Life: A Mosaic

Dr Charles J BOFFA

Man is a singular creature and unique among God's creations. While unfolding the pageant of Life, one realizes that there is no absolute knowledge. Accurate dating is impossible.

The stages of growth fade as they recede into the past. It is surmised that Neolithic impulses probably derived from somewhere in the Middle East and their lines converge towards some pole of dispersion. However, this exposition and indeed the whole saga of developments and ethnology, is still not clear. Beginnings have a sort of fragility. I am inclined to say that the theory of cultural diffusion from a single area is only partly correct.

It is reasonable to assume that there was probably a gradual human advancement in various countries which was influenced by migrations, trade people and contacts. There are lacunae in our knowledge of pre-Neolithic and Neolithic periods in the Mediterranean and environs. Time scales are not easy to define. To give examples, it is unlikely that the cultivation of such different crops as wheat and barley in Mesopotamia, rice in Thailand, maize in Mexico, in ancient times were related to each other. Furthermore, it is quite possible, that bronze and copper metallurgy in Crete, Cyprus, North-East Asia and Peru, also developed separately.

It is pertinent to point out, that the ascent of Man, although on different levels and in different ways, went on in countries sometimes far from each other separately. Of course knowledge and culture in the Mediterranean region as elsewhere were passed on - a cross fertilization during migrations. In recent years, improved dating techniques and DNA, are bringing about changes in archaeological and anthropological chronologies in various countries.

In 1899, W.Z. Ripley in his book 'The Races of Europe' one of the first to classify Europeans on the basis of multiple traits, names three races: Nordic, Alpine and Mediterranean - labels used ever since. In essence but not clear cut, this old division of past time inhabitants still remains fairly useful, but it was based mainly on generalizations and does not tally fully with the present situation.

It is generally agreed that all the present day races of mankind are variants of one species, Homo Sapiens. Man has through the ages been adaptive. Apart from the antiquity of the races of mankind, there is the transformation of Man as distinct geographical varieties and the improvement of the brain.

Large communities of Palaeothic Man – Homo Sapiens, lived some 50,000 to 60,000 (?) years ago in Europe, heralding the great surge forward of the Neolithic Age. Ancient remains have been found in France, Spain, Czechoslovakia, Germany, etc.

Over the millennia there have been extensive and continuous migrations from country to country which resulted in countless marriages between Peoples. European citizens are now not a uniform race and encompass different nationalities, customs and creeds. In general terms, before the beginning of the last century, a high proportion of people in central Europe were designated mostly but not all in which brachycephaly (round or short headed) was common, without implying that everyone living in Europe was so. The people varied in size from medium to tall with a wide variation in complexion.

Our ancestors of Neolithic times, possibly around 8,000 years ago or so while standing on high ground in the south east of Sicily, looked and saw far away Malta and Gozo and wondered, a spirit of curiosity was born.

While on a visit (1974) to the Isole Eolie, Dr. T. Gouder and I were invited by the famous and eminent Italian archaeologist Prof. L. Bernabo Brea and we had a very interesting discussion with him. One of the questions I asked him was - when was Sicily in his opinion first inhibited? He told us that it is difficult to be exact but it could have been as long as 20,000 years ago, or probably earlier.

Italy had various prehistoric cultures, like the Celts, Etruscans, Phoenicians, Greeks, Carthaginians and Romans. All these affected the genetic mixture. In 1999, important archaeological deposits were discovered at Iserna-La Pineta. These were analyzed and dated to the early Palaeolithic. This period relates to the early part of the Stone Age which is intriguing and bewildering.

What kind of people are the inhabitants of the Maltese Islands? The 1992 statistics showed that 362950 people inhabited our islands. At present (mid 2007) the figure is 405577. Because of its central position in the Mediterranean, Malta is a typical

example of cultural crossroads and convergence of Mediterranean civilizations. In broad terms Malta and Gozo reflect to a large degree the influence of Mediterranean migrations. If one analyzes the features and skin colour, one finds that there is a surprising mixture of people who live or have lived through the centuries on the Mediteranean littoral. Walking through the streets of Valletta, Hamrun, Sliema, the Three Cities of Cottonera, Birkirkara, Mosta, Rabat, Zejtun, Paola, Zebbug, Siggiewi etc., one will notice a variety of features, statures and complexions.

I am inclined to say that there is not a Maltese type any more than there is one European type. There are of course variations within a range. Looking at a cross section of our population one notices mixed differences and similarities with here and there unclear dividing lines in a few villages to mark off distinct pockets. Maltese ethnology embraces Mediterranean, especially Italian, Phoenician, Greek, Lebanese, Armenoid, Saracenic and to a much lesser extent Nordic elements. Our civil laws exhibit an ensemble of Roman and Anglo Saxon statutes, while certain folkloric songs show Sicilian influences.

As time goes on more details are coming to light about the fascinating subject of human genes. During the last few decades a lot of research has been going on which included the start of the Human research project which aims among other aspects to have if possible a broad map of human genes. It aims to decipher gradually what a very large number of genes do and how they function.

It is believed that about one fourth deals with the brain followed by genes dealing with the placenta, liver, white blood cells, bone marrow, lungs, heart, the embryo and breasts. Dr Craig Venter, chief of the Institute for Genomic Research in Lockville Maryland, believes that great advances would be made and in due course about three quarters of all human genes would be known. Of course other researchers in various countries continue with their work with a view to unravel the web of human life with all its complexities.

The make-up is laid down by genetic heritage. Of course both the environment, level of nutrition and the circumstances of foetal development, influences constitutions and characters. Four main factors are responsible for the human differentiations. These are:

1. Gene Mutation
2. Natural Selection
3. Genetic Drift
4. Population mixture

Certain diseases have a significant heritable component. To give some examples. These vary from slight, such as in multiple sclerosis and some cancers, to moderate in psychiatric defects, diabetes, certain heart diseases, high blood pressure, migraines, acne, psoriasis, certain mouth and dental conditions and rather high in eye defects.

The ones I have mentioned are by no means complete and there is much truth that genes design to a considerable extent our life and future. They also often play a role in the development process, aptitudes and skills. However we should not let our imagination to run amok and turn us into creative visionaries. Ethical principles must be always kept in mind when asking about family history.

It seems likely that within limits certain genes also play a role of course besides other factors such as nutrition and lifestyle in determining lifespan. In our islands, increasingly people are living to be much older, many reaching about 80 years or more instead of around 70 or less up to a century ago. As nutrition and healthcare improves many youngsters are maturing younger and growing taller than their grandparents.

Gene-Gene interactions are hypothesized to play an important role in the etiology of various genetic disorders. For example researchers have localized (1996 and 1997) a second gene responsible for the most common type of diabetes and believe severe mutation of the same gene can cause a rare form of the disease among younger people.

An international team of scientists studied 217 individuals from the Botnia region in Finland. The 217 subjects were from 26 families who had 3 or more members stricken with non-insulin dependant, or type 2 diabetes (NIDDM), which afflicts more than 100 million people worldwide. The researchers located a gene called NIDDM2 on chromosome 12, that may be involved in a significant fraction of adult-onset diabetes, according to a study in an edition of the journal Genetics (Sept 1996) "Our study has narrowed it to a very small part of the genome on chromosome 12" said Dr Melanie Mahtani, a geneticist at the Whitehead Institute for Biomedical Research in Cambridge, Massachusette and principle author of the study.

As for faces themselves they are almost entirely genetically determined, as we can see from the startling similarity of identical twins appearances. Whatever genes are involved in coding for facial features they must be an enormous number to judge from the variety we see everyday. No two faces look alike, apart from those of identical twins.

It is possible that these genes may range over the entire genome, or they could perhaps cluster in some complex group, like those that code for HLA types. There could be some as yet unknown factors.

In Moments of Vision (1917), Thomas Hardy refers briefly to heredity:

I am the family face
Flesh perishes, I live on
Projecting trait and trace
Through time to times anon
And leaping from place to place
Over oblivion.

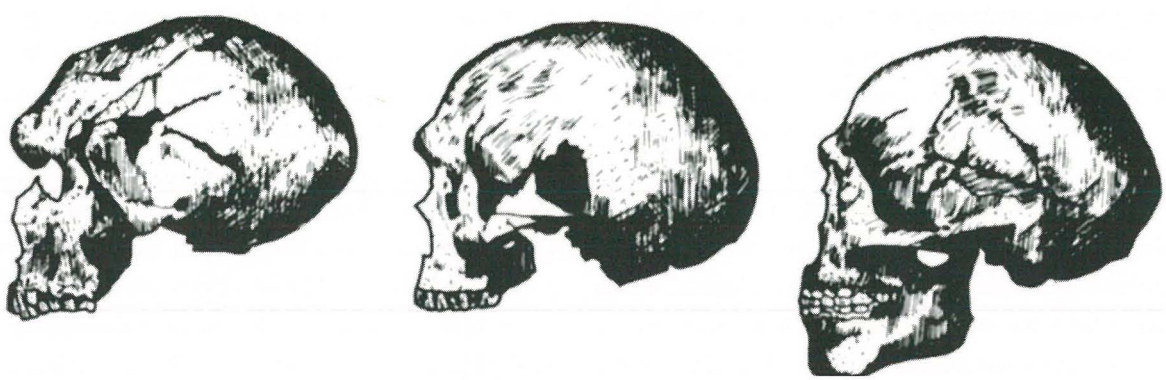
It is surmised that Punic Man had a capacity of approximately 1520 c.c. which is almost the average modern capacity of 1550c. c. However one must keep in mind that it is quality not quantity which counts most. It is not possible to arrive to any conclusions regarding the average Maltese IQ, because a survey has never been carried out.

A few other considerations may not be amiss. Man lived and vanished in the shasms of the very ancient past for countless millennia until the final Palaeolithic period. The late Palaeolithic cultures tell of extensive migrations and gradual improvement in Man's mental and manual capabilities. The last Ice Age was a period when compared to the previous hundreds of thousands of years and other glacial periods preceding it, human development including the brain seems to have quickened appreciably. The period around 50,000 B.C. (?) or so probably ushered in Man with a better mental potential and more skills. Of course this does not mean that before that time his mind was a sort of almost a blank sheet. Far from it.

The brain can be defined as that part of the central nervous system contained in the cranial cavity and consists of the cerebrum, pons and medulla oblongata. The functions and workings of the brain is a lifelong coordinated process which regulates all human activities. Human beings are not as strong as animals of a more or less similar size such as the chimpanzees, but they have the most advanced brain of all living creatures.

The human brain is wonderfully complex. It is the body's control centre with more than 8 million cells and controls all the body's systems which includes the skeleton and muscles, thinking, circulation, the nervous system, digestion, respiration, immune system, limbs, reproduction, etc. It is likely that memories are stored in various locations in the brain.

It floats inside the skull in shockproof fluid protected from the knocks and jolts and wrapped in three cushioning layers of tissue. This amazing organ is more powerful, more creative than any computer and among the most wonderful creations of Almighty God. Looking at the surface of the brain (the cortex)



Types of very ancient skulls: At left is a Neanderthal from Austria. In the centre is one from Qafza, Palestine and at right one from an upper Palaeolithic site at Predmosti, Czechoslovakia

Modern White *Middle Ages* *New Stone Age Man*

under a powerful microscope one sees a very specialized and complicated mass of nerve cells known as grey matter. These are connected by a vast network of pathways which carry millions of messages between the brain and the rest of the body. There is an element of spontaneous electrical activity which includes brain waves which can be observed with amplifications as in an electroencephalogram

There have been great strides forward in understanding how the brain functions. However there is a tendency to use consciousness to mean awareness and recognition but consciousness encompasses an element difficult to describe and also some ambiguity.

It is well known in general terms and not related specifically to the skull that bone tissue is not static and that healthy bones require very gradual modeling and remodeling to adapt to the dual roles as a supportive frame and a regulator of mineral homeostasis. The skeleton is very gradually remodeled via the coordinated activities of bone-resorbing osteoclasts and bone forming osteoblasts.

The mandible is the hardest bone in the skeleton. The development of the jaws and chin suggest a functional linkage between biomechanics, symphyseal structure and genetic factors.

I believe that masticatory biomechanical adaptation has affected the human jaws before and during the Pleistocene and more recent Man in Europe and elsewhere. In a wide biological context the retraction of the human mandible over the ages presented certain constraints in the oral cavity, such as not enough space for wisdom teeth and unerupted teeth. The chin and jaws may represent within limits an adaptative solution for necessary functional demands. However it is not possible at present to point clearly and exactly to the generative force behind the development of the uniquely human mandible and the formative factors. However I am inclined to say that the great changes in diet over countless millenniums have brought about significant changes in the mandible, maxilla, dental arches and teeth.

Tooth morphology has played an important part in human palaeontology because teeth preserve well and dental features are easily identified. Because dietary habits determine various aspects of man's lifestyle and health, theories and analysis of past dietary trends have been important in the study of men. Major dietary types can to some extent be distinguished by their microwear and attrition. However it must be stated that comparative anatomy is not a clear – cut subject, and in a general way, allows only certain specialised diets to be ruled out.

Interspecific comparisons of tooth morphology involve an understanding (not an easy exercise) to particular diets. It is significant that a high proportion of the teeth from ancient skulls unearthed in Malta show extensive attrition and it is possible to make generalization about their diet. Research is under way to document wear patterns of ancient teeth and present day ones. Quantification and microscopic studies of the length and width of scratches, pit frequencies and minor changes on the surface of teeth may in due course provide a basis for evaluating better the effects of diets.

At this point some references to the Carbon Isotope analysis of bone is opportune. It is known that the isotopic composition of carbon in an animal's bones is a function of the isotopic carbon in its diet (De Niro and Epstein 1978).This is true for both the carbonate and collagen fractions of bone. The ratio of 13c to 12c in plants eaten by herbivores depends mainly upon the photosynthetic pathway that the plants use. It may be possible to apply this method to fossil bones, however if it can be demonstrated that diagenetic changes do not effect the carbonisotope ratios.

Strontium analysis of fossil bone (Toots and Voorhies, 1965) has helped to estimate past diets because plants contain varying minute amounts of strontium.

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Dr Charles J. BOFFA BChD, BPharm, FICD, PhD

Formerly Consultant Dental Surgeon and Lecturer
Department of Health

M F D CORRESPONDENCE email: journalmfd@yahoo.com

Course for Teachers in Family Medicine

Dr Noel CARUANA

The Malta College of Family Doctors organized a course for family doctors wishing to become Trainers in Family Medicine. The course was organized in two modules during 8th and 9th September and 21st to 23rd September 2007 in collaboration with the Royal College of General Practitioners and The European Academy of Teachers in General Practice (EURACT).

The modules were delivered by qualified teachers from the Malta College of Family Doctors who included Dr Anton Bugeja, Dr Noel Caruana, Dr Doreen Cassar, Dr Patricia De Gabriele, Dr Mario R Sammut, Dr Philip Sciortino and Dr Andrew P Zammit. Dr Marek Jezierski represented the Royal College of General Practitioners, supervised the teaching and gave feedback to the teachers.

The College used an open selection process based on anonymous Curriculum Vitae: out of 24 applicants, 14 participants were selected. The number of teacher trainees was consistent with the established best practice that ensures optimal teaching quality. This practice is the standard adopted by the Royal College of General Practitioners.

The seven local tutors devised their own educational programme, incorporating their expertise achieved through previous RCGP Teachers' Courses and a Leonardo EURACT Course for Trainers in Family Medicine. The teaching material was a synthesis of these two educational programmes but several of the tutors resourced their own materials. Outside the directly taught material, there was particular emphasis on giving teaching presentations to groups and looking at video consultations.

At the end of the second module a certificate of successful completion of this Teachers Course in Family Medicine was presented to the following participants: Drs Sonia Abela, Gunther Abela, Joseph Agius Muscat, Andrew Baldacchino, Rudolph Busuttil, Noel Camilleri, Maria Stella Caruana, Karl Causon, Renzo De Gabriele, Charmaine Fava, Alfred Grech, Robert Portelli, Raymond Sacco and Ramon Tonna. The course was quite a powerful learning exercise for the tutors themselves in beginning to appreciate the complexities of being responsible for delivering an educational course. As for the participants, they were given the opportunity to develop a different attitude towards helping junior doctors during their Vocational Training. Like all educational experiences, this was merely the beginning of a journey…which we hope will proceed with new experiences in the not too distant future.

Participants and tutors with MCFD President and Minister of Health (sitting centre)

Dr Noel CARUANA

Chairman Teachers Course Coordinating Team

Major Depressive Disorder

Dr Arlene BONELLO

Depression in its various forms is a commonly seen disorder in general practice. Indeed, over 90% of patients suffering from depression are seen, diagnosed and treated in primary care. The most severe, chronic and complicated cases are referred on to a psychiatrist.

Background

The World Health Organization (WHO) predicts that by 2020, depression will become the second leading cause of disability adjusted life-years lost worldwide, after ischaemic heart disease. About 20 per cent of the population will develop a depressive episode at some point in their lives, with up to 85 per cent of patients having more than one episode. Further, one in 10 patients with depression will commit suicide, and up to 20 per cent of patients with depression will have symptoms for two years or more (chronic depression)[1]

General practitioners are immensely variable in their ability to recognize depressive illnesses, with some recognizing virtually all the patients found to be depressed at independent research interview, and others recognizing very few. The communication skills of the GP make a vital contribution to determining their ability to detect emotional distress, and those with superior skills allow their patients to show more evidence of distress during their interviews, thus making detection easy. Those doctors with poor communication skills are more likely to collude with their patients, who may not themselves wish to complain of their distress unless they are asked directly about it.[2]

Those patients with more severe disorders, and those presenting psychological symptoms to their doctor, are especially likely to be recognized as depressed, while those presenting with somatic symptoms for which no cause can be found are less likely to be recognized.[3]

Pathophysiology

The underlying pathophysiology of major depressive disorder (MDD) has not been clearly defined. Clinical and preclinical trials suggest a disturbance in CNS serotonin (i.e., 5-HT) activity as an important factor. Other neurotransmitters implicated include norepinephrine (NE) and dopamine (DA).

The role of CNS serotonin activity in the pathophysiology of MDD is suggested by the efficacy of selective serotonin reuptake inhibitors (SSRIs) in the treatment of MDD. Furthermore, studies have shown that an acute, transient relapse of depressive symptoms can be produced in research subjects in remission using tryptophan depletion, which causes a temporary reduction in CNS serotonin levels. Serotonergic neurons implicated in affective disorders are found in the dorsal raphe nucleus, the limbic system, and the left prefrontal cortex.[4]

Clinical experience indicates a complex interaction between neurotransmitter availability, receptor regulation and sensitivity, and affective symptoms in MDD. Drugs that produce only an acute rise in neurotransmitter availability, such as cocaine, do not have efficacy over time as antidepressants. Furthermore, an exposure of several weeks' duration to an antidepressant usually is necessary to produce a change in symptoms. This, together with preclinical research findings, implies a role for neuronal receptor regulation over time in response to enhanced neurotransmitter availability.

All available antidepressants appear to work via 1 or more of the following mechanisms: (1) presynaptic inhibition of uptake of 5-HT or NE; (2) antagonist activity at presynaptic inhibitory 5-HT or NE receptor sites, thereby enhancing neurotransmitter release; or (3) inhibition of monoamine oxidase, thereby reducing neurotransmitter breakdown.[5]

Symptoms

Depression refers to a wide range of mental health problems characterized by the absence of a positive affect (a loss of interest and enjoyment in ordinary things and experiences), low mood and a range of associated emotional, cognitive, physical and behavioural symptoms. Distinguishing the mood changes between major depression and those occurring 'normally'

remains problematic: persistence, severity, the presence of other symptoms and the degree of functional and social impairment form the basis of that distinction.

Commonly, mood and affect in a major depressive illness are unreactive to circumstance, remaining low throughout the course of each day, although for some people mood varies diurnally, with gradual improvement throughout the day only to return to a low mood on waking. A person's mood may be reactive to positive experiences and events, although these elevations in mood are not sustained, with depressive feelings re-emerging, often quickly.

Behavioural and physical symptoms typically include tearfulness, irritability, social withdrawal, reduced sleep, an exacerbation of pre-existing pains, and pains secondary to increased muscle tension and other pains,[6] lowered appetite (sometimes leading to significant weight loss), a lack of libido, fatigue and diminished activity, although agitation is common and marked anxiety frequent. Along with a loss of interest and enjoyment in everyday life, feelings of guilt, worthlessness and deserved punishment are common, as are lowered self-esteem, loss of confidence, feelings of helplessness, suicidal ideation and attempts at self-harm or suicide. Cognitive changes include poor concentration and reduced attention, pessimistic and recurrently negative thoughts about oneself, one's past and the future, mental slowing and rumination.[7]

Diagnosis

In order to diagnose depressive illness, diagnostic classifications such as the 'International classification of diseases' 10th edition (ICD-10) and the 'Diagnostic and statistical manual of mental disorders' 4th edition (DSM-IV), an American system, have been developed. In both these classifications (see below), a diagnosis of depression is made from the presence of a number of specific symptoms, or a syndrome, for a minimum of two weeks. It therefore relies on one of the most fundamental medical skills, that of recognizing patterns of symptoms. The two systems differ in that ICD-10 provides guidelines in making a diagnosis, whereas
DSM-IV ismore explicit in the symptoms required to make a diagnosis. However, both systems allow the coding of somatic symptoms, psychotic symptoms, and other illness characteristics.

The ICD-10 Classification System for Depression

Classification Symptoms of a Depressive Episode. Typical Features for a Period of Around Two Weeks:

- Depressed mood
- Loss of interest and enjoyment
- Reduced energy or increased tiredness
- Reduced activity

Other Common Symptoms:

- Reduced concentration and attention
- Reduced self-confidence and self-worth
- Guilt and unworthiness
- Bleak and pessimistic regarding the future
- Self-harm or suicidal ideas
- Disturbed sleep
- Reduced appetite

Somatic Symptoms:

Low mood may vary over the course of the day
Motor activity may be slowed or increased
Sexual appetite my be reduced
Patient may lose weight
Loss of interest and unreactivity of mood may be present

Psychotic symptoms (usually hallucinations or delusions) may be present in severe depression. Determination of the severity of depression is based upon a clinical judgement involving the number, type and severity of symptoms.

Diagnostic Guidelines

F32.0 Mild Depressive Episode

The presence of at least two of the typical symptoms of depression plus at least two of the other symptoms. None of the symptoms should be present to an intense degree. Minimum duration of the whole episode is about 2 weeks. An individual with a mild depressive episode is usually distressed by the symptoms and has some difficulty in continuing with ordinary work and social activities, but will probably not cease to function completely.

A fifth character may be used to specify the presence of the somatic syndrome:

F32.00 Without Somatic Symptoms

The criteria for mild depressive episode are fulfilled, and there are few or none of the somatic symptoms present.

F32.01 With Somatic Symptoms

The criteria for mild depressive episode are fulfilled, and four or more of the somatic symptoms are also present. (If only two or three somatic symptoms are present but they are unusually severe, use of this category may be justified).

Moderate Depressive Episode

The presence of at least two of the three most typical symptoms noted for mild depressive episode should be present, plus at least three and preferably four of the other symptoms. Several symptoms are likely to be present to a marked degree, but

this is not essential if a particularly wide variety of symptoms is present overall. The minimum duration of the whole episode is about 2 weeks. An individual with a moderately severe depressive episode will usually have considerable difficulty in continuing with social, work or domestic activities. A fifth character may be used to specify the occurrence of somatic symptoms:

F32.10 Without Somatic Symptoms

The criteria for moderate depressive episode are fulfilled, and few if any of the somatic symptoms are present.

F32.11 With Somatic Symptoms

The criteria for moderate depressive episode are fulfilled, and four or more or the somatic symptoms are present. (If only two or three somatic symptoms are present but they are unusually severe, use of this category may be justified).

Severe Depressive Episode

All three of the typical symptoms noted for mild and moderate depressive episodes should be present, plus at least four other symptoms, some of which should be of severe intensity. However, if important symptoms such as agitation or retardation are marked, the patient may be unwilling or unable to describe many symptoms in detail. An overall grading of severe episode may still be justified in such instances. The depressive episode should usually last at least 2 weeks, but if the symptoms are particularly severe and of very rapid onset, it may be justified to make this diagnosis after less than 2 weeks. During a severe depressive episode it is very unlikely that the sufferer will be able to continue with social, work, or domestic activities, except to a very limited extent.

Severe Depressive Episode with Psychotic Symptoms

A severe depressive episode which meets the criteria given for severe depressive episode without psychotic symptoms and in which delusions, hallucinations, or depressive stupor are present. The delusions usually involve ideas of sin, poverty, or imminent disasters, responsibility for which may be assumed by the patient. Auditory or olfactory hallucinations are usually of defamatory or accusatory voices or of rotting filth or decomposing flesh. Severe psychomotor retardation may progress to stupor. If required, delusions or hallucinations may be specified as mood-congruent or mood-incongruent.[8]

DSM-IV Diagnostic Criteria

a. A minimum of five symptoms from the following list have been present during the same 2-week period and represent a change from previous functioning. One of the symptoms must be 1 or 2, as listed below: 1) Depressed mood most of the day, nearly every day, as indicated either by subjective report (e.g. feels sad or empty) or observation made by others (e.g. appears tearful) 2) Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day, as indicated either by subjective account or observation made by others. Do not include symptoms that are clearly due to general medical condition or mood-incongruent delusions or hallucinations 3) Significant weight loss when not dieting or weight gain (e.g. a change of more than 5% of body weight in a month) or decrease or increase in appetite nearly every day 4) Insomnia or hypersomnia nearly every day 5) Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down) 6) Fatigue or loss of energy nearly every day 7) Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick) 8) Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others) 9) Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or specific plan for committing suicide
b. The symptoms do not meet the criteria for a mixed episode
c. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning
d. The symptoms are not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g., hypothyroidism)
e. The symptoms are not better accounted for by bereavement, i.e., after the loss of a loved one, the symptoms persist for longer than 2 months or are characterized by marked functional impairment, morbid preoccupation with worthlessness, suicidal ideation, psychotic symptoms, or psychomotor retardation.[9]

Differential Diagnosis

The differential diagnosis in patients presenting with alterations in mood is extensive and should include consideration of the following:

1. Personality disorders: Certain personality disorders (e.g., borderline personality disorder) may present with mood changes as a prominent symptom. The presence of a personality disorder can be difficult to determine in the setting of acute affective symptoms. Many patients who are depressed who appear labile, demanding, or pathologically

dependent look dramatically different once the depressive episode has been treated adequately.[10]

2. Mood disorders secondary to CNS conditions: These include a broad range of physiologic and structural CNS processes that can produce changes in mood and behaviour. Major Depressive Disorder (MDD) can produce measurable cognitive deficits or a worsening of preexisting dementia. This decline in cognitive functioning, which, on formal testing, appears to arise from impaired concentration or motivation, is referred to as dementia of depression and should remit with successful treatment of the depressive episode. MDD does not cause focal neurological signs. Such findings should prompt an evaluation for other organic syndromes.
3. Alzheimer disease: This disease and other degenerative and vascular dementias can be associated with affective symptoms. Mood disorders are very prominent in Parkinson's disease, Huntington's disease, multiple sclerosis, stroke, and seizure disorders.[5]
4. Neoplastic lesions of the CNS: These lesions also can cause changes in mood and behaviour before the onset of focal neurological signs.
5. Inflammatory conditions: Conditions such as systemic lupus erythematosus (SLE) can produce a wide range of neuropsychiatric signs and symptoms, likely because of alterations in the blood-brain barrier and an autoimmune cerebritis.
6. Sleep disorders: Obstructive sleep apnea, especially, can cause significant medical and psychiatric symptoms and often is missed as a diagnosis. Patients, and, if necessary, their partners, should be interviewed regarding their sleep quality, daytime sleepiness, and snoring. Polysomnography can help make the diagnosis and guide treatment.
7. Infectious processes: These include syphilis, Lyme disease, and HIV encephalopathy, which can cause mood and behavior changes.
8. Pharmacologic agents: Substances that can produce changes in mood include antihypertensive medications (especially beta-blockers, reserpine, methyldopa, and calcium channel blockers); steroids; medications that affect sex hormones (e.g., estrogen, progesterone, testosterone, gonadotropin-releasing hormone [GnRH] antagonists); H2 blockers (e.g., ranitidine, cimetidine); sedatives; muscle relaxants; appetite suppressants; and chemotherapy agents (e.g., vincristine, procarbazine, L-asparaginase, interferon, amphotericin B, vinblastine).
9. Endocrinologic disorders: Disorders involving the hypothalamic-pituitary-adrenal axis or thyroid are especially likely to produce changes in mood. These include Addison disease, Cushing disease, hyperthyroidism, hypothyroidism, prolactinomas, and hyperparathyroidism.
10. Substance use, abuse, or dependence: These can cause significant mood symptoms. This is especially true of alcohol, cocaine, amphetamines, marijuana, sedatives/hypnotics, and narcotics. Inhalant abuse also should be considered, particularly among young male patients. Other substance-related and psychiatric processes either can present with mood disturbance as the primary symptom or can occur together with MDD.
11. Dysthymia: This mood disorder presents with low mood as a primary symptom. Dysthymia can predate a depressive episode. The symptoms of dysthymia alone do not meet criteria for MDD and must be present for at least 2 years.
12. Anxiety disorders: Patients with anxiety disorders are at higher risk for developing comorbid depression. In such patients, it is important to identify the anxiety disorder because they often require specific treatment approaches. Commonly encountered anxiety disorders include panic disorder, obsessive-compulsive disorder, generalized anxiety disorder, posttraumatic stress disorder, and phobia.
13. Eating disorders: People with eating disorders (EDs) also have a high rate of comorbid MDD and require specific treatment approaches. These disorders include bulimia, anorexia nervosa, and ED not otherwise specified.[5]
14. Bereavement: Depressed mood, disturbed sleep, and crying occur in over 50 per cent of bereaved subjects, but there is no disturbance of self-esteem. However, about one-third of the subjects have feelings of guilt concerning the dead person.[11]
15. Schizophrenia: Patients with schizophrenia may develop pronounced depressive symptoms. Persistent non-affective delusions or hallucinations, and even depressive hallucinations that are continuous rather than occasional, suggest schizophrenia.[11]

Aetiology

Depression is a broad and heterogenous psychiatric disorder that affects people of all ages, from childhood to old age. It varies in severity and duration, and there is a difference in incidence between sexes, being more common in women with a prevalence twice that observed in men. Boys and girls are affected equally. It is unlikely that there is only one cause of depression. Rather, its aetiology is multifactorial.

Aetiology can be divided into predisposing, personality and provoking factors.

Predisposing Factors

Genetic influence: It has been recognized for over 50 years that mental disorders, including mood disorders, aggregate in families. By means of twin studies and studies of adopted children, the genetic contribution to affective disorders has been established. In twin studies, for example, concordance is 80 per cent for bipolar disorders and 60 per cent for recurrent depression. Early childhood environment: Challenges are faced in trying to identify the influence of an individual's early life experiences on his or her predisposition to affective disorders. For example, much research has been carried out on investigating the importance of the parent-child relationship. Clear evidence suggests that lack of adequate parental care may be a developmental risk factor for adult depression. Many studies have also shown that early bereavement – especially loss of mother by death or separation- makes people more vulnerable to later loss experiences. An influential study by Brown et al argued that the loss of the mother before the age of 11 years was associated with a greater risk of adult depression, suggesting a direct causal link.[12] Maternal over – protection has also been incriminated in several studies in which depressed patients remembered their childhoods.

Personality Factors

Those who develop depressive illnesses are more likely to have low self – esteem and are rather more likely to be introverted and obsessional. Low self – esteem greatly increases the risk of a depressive illness following a stressful life event. Negative views about oneself, one's future and one's surroundings are said to constitute the "cognitive triad" which renders people vulnerable to depressive illness.[11]

Provoking Factors

Loss events may be the loss of a relationship, bereavements, threatened future losses or even failure to be promoted. These are especially likely to precipitate depression in those with low self – esteem. The loss may precede the episode of depression by as much as one year.

Physical illness commonly contributes to the genesis of depressive illnesses seen in general medical settings. For example illnesses as stroke, a heart attack, cancer, Parkinson's disease, and hormonal disorders can cause depressive illness, making the sick person apathetic and unwilling to care for his or her physical needs, thus prolonging the recovery period.

Stressful social circumstances such as having unsatisfactory living conditions, poor interpersonal relationships and very little social support can favour the release of depressive phenomena.[11]

Management

A wide range of effective treatments is available for depressive disorder. Brief psychotherapy (e.g., cognitive behavioral therapy (CBT), interpersonal therapy) has been shown in clinical trials to be an effective treatment option, either alone or in combination with medication. Medication alone also can relieve symptoms. However, the combined approach generally provides the patient with the quickest and most sustained response.

Mild Depressive Episode

The large majority of patients with depression are cared for solely in primary care.

For a significant number of people with mild to moderate depression, brief interventions delivered by the primary care team are effective; for others – particularly if they have not responded to the initial brief intervention – more complex interventions, which could be provided in primary or secondary care, are required.

Many patients with milder depression respond to interventions such as exercise e.g. advice is given to follow a supervised and structured exercise programme of approximately 45 minutes three times a week for a period of 10 to12 weeks.

Guided self-help, although many improve while being monitored without additional help, may be beneficial. More structured therapies, such as problem-solving, brief Cognitive Behavioural Therapy (CBT) or counselling can be helpful. Antidepressant drugs and psychological therapies, such as longer-term CBT or interpersonal psychotherapy (IPT), are not recommended as an initial treatment; these may be offered when simpler methods (for example, guided self-help or exercise) have failed to produce an adequate response.

Antidepressants are not recommended for the initial treatment of mild depression, because the risk–benefit ratio is poor.

The use of antidepressants should be considered for patients:

- with mild depression that is persisting after other interventions.
- whose depression is associated with psychosocial and medical problems.
- with a past history of moderate or severe depression present with mild depression[13]

Moderate or Severe Depressive Episode

In moderate or severe depression, the choice of treatment will reflect patient preference, past experience of treatment and the fact that the patient may not have benefited from other interventions as explained above.

With more severe depression, the risk of suicide should always be considered. Referral to secondary services should be

based on this assessment, the degree of functional impairment and the presence of significant comorbidities or specific symptoms.

Where a patient presents considerable immediate risk to self or others, for example patients with symptoms of psychotic depression, urgent referral for specialist treatment should be arranged.[13]

Antidepressant Drugs

There is more evidence for the effectiveness of antidepressant medication in moderate to severe depression than in milder depression. Careful monitoring of symptoms, side effects and suicide risk (particularly in those aged under 30) should be routinely undertaken, especially when initiating antidepressant medication. It is also important to monitor patients for relapse and withdrawal symptoms when reducing or stopping medication and they should be warned about the risks of reducing or stopping medication. Treatment failures often are caused not by clinical resistance, but by medication noncompliance, inadequate duration of therapy, or inadequate dosing.

Patients started on antidepressants who are not considered to be at increased risk of suicide should normally be seen after two weeks. Thereafter they should be seen on an appropriate and regular basis, for example, at intervals of two to four weeks in the first three months and at longer intervals thereafter, if response is good. Antidepressants should be continued for at least six months after remission of an episode of depression, because this greatly reduces the risk of relapse. When a patient has taken antidepressants for six months after remission, healthcare professionals should review with the patient the need for continued antidepressant treatment. This review should include consideration of the number of previous episodes, presence of residual symptoms, and concurrent psychosocial difficulties.[13]

Tricyclic Antidepressants (TCAs) include amitriptyline, nortriptyline, desipramine, clomipramine, doxepine, protriptyline, trimipramine, and imipramine.

This group has a long record of efficacy in the treatment of depression and has the advantage of lower cost. The disadvantages include the need to titrate the dose to a therapeutic level and considerable toxicity in overdose.

Adverse effects largely are due to their anticholinergic and antihistaminic properties and include sedation, confusion, dry mouth, orthostasis, constipation, urinary retention, sexual dysfunction, and weight gain. Caution should be used in patients with cardiac conduction abnormalities.[5]

Selective Serotonin Reuptake Inhibitors (SSRIs) include fluoxetine, paroxetine, sertraline, fluvoxamine, citalopram, and escitalopram. This group has the advantage of ease of dosing and low toxicity in overdose. Common adverse effects include GI upset, sexual dysfunction, and changes in energy level (i.e., fatigue, restlessness).[5]

Selective Serotonin/Norepinephrine Reuptake Inhibitors

(SNRIs) include venlafaxine and duloxetine. Safety, tolerability, and side effect profiles are similar to that of the SSRIs, with the exception that the SNRIs have been associated (rarely) with a sustained rise in blood pressure. SNRIs can be used as first-line agents, particularly in patients with significant fatigue or pain syndromes associated with the episode of depression. The SNRIs also have an important role as second-line agents in patients who have not responded to SSRIs.[5]

Atypical Antidepressants include bupropion, nefazodone, mirtazapine, and trazodone. This group also shows low toxicity in overdose and may have an advantage over the SSRIs by causing less sexual dysfunction and GI distress.

Bupropion is associated with a risk of seizure at higher doses, especially in patients with a history of seizure or eating disorders.

Mirtazapine is a potent antagonist at 5-HT2, 5-HT3, alpha2-, and histamine (H1) receptors and, thus, can be very sedating. Adverse effects such as drowsiness and weight gain may tend to improve over time and with higher doses.

Trazodone is very sedating and usually is used as a sleep aid rather than as an antidepressant.

Monoamine Oxidase Inhibitors (MAOIs) include phenelzine and tranylcypromine.

MAOIs are widely effective in a broad range of affective and anxiety disorders. However they are potentially toxic drugs and side effects are common.

Because of the risk of hypertensive crisis, patients on these medications must follow a low-tyramine diet. Other adverse effects can include insomnia, anxiety, orthostasis, weight gain, and sexual dysfunction.[5]

Non Pharmacologic Treatment

Electroconvulsive Therapy (ECT) involves the induction of a modified epileptic seizure given through electrodes placed bitemporally or with both on the non-dominant hemisphere. It is a highly effective treatment for depression and may have a more rapid onset of action than drug treatments. Advances in brief anaesthesia and neuromuscular paralysis have improved the safety and tolerability of this modality. Risks include those associated with brief anaesthesia, postictal confusion, and, more rarely, short-term memory difficulties. ECT is indicated when a rapid antidepressant response is needed, when drug therapies have failed or when there is a history of good response

to ECT. It is particularly effective in the treatment of delusional depression.[14]

Prognosis

The average age of the first episode of a major depression occurs in the mid-20s and although the first episode may occur at any time, from early childhood through to old age, a substantial proportion of people have their first depression in childhood or adolescence.[15] It is generally thought that depression is usually a time-limited disorder lasting up to six months with complete recovery afterwards. However around 20% of patients remain depressed for 2 years or more.

While around half of those affected by depression will have no further episodes, depressive illnesses, have a strong tendency for recurrence. At least 50% of people following their first episode of major depression will go on to have at least one more episode,[16] with early onset depression (at or before 20 years of age) particularly associated with a significantly increased vulnerability to relapse.[17] After the second and third episodes, the risk of further relapse rises to 70% and 90% respectively.[16] Thus, while the outlook for a first episode is good, the outlook for recurrent episodes over the long term can be poor, with many patients suffering symptoms of depression over many years.

Dr Arlene BONELLO MD DFM
Trainee Specialist Family Medicine

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After reviewing the answers you may claim 1 CME point by quoting MFD/Dec 2007 CME 001 on your application for accreditation

Answers to Self-Assessment quiz:

Q1	b	Q6	b
Q2	a	Q7	a b c
Q3	c	Q8	a b c d
Q4	c	Q9	a b c d
Q5	c	Q10	a b d

Continued Medical Education: Self Assessment Quiz

The self-assessment quiz contains two types of questions: Type 1 questions have only one correct answer and may have four or five choices. Type 2 questions may have more than one correct answer offering four multiple true-false options.

Type 1 Questions

Each question has one correct answer

Q1. Which of the following statements about the use of oxygen in COAD (Chronic Obstructive Airway Disease) is true?

a. It is recommended for patients with night time hypoxaemia only.
b. It is recommended for patients with PaO2 of 88% or less.
c. It can be helpful even in patients with mild hypoxaemia.
d. It improves mortality with mild hypoxaemia (Pa O2 90-95%).

Q2. Which one of the following statements about impetigo is correct?

a. It is seen to spread quickly in schools and day care centres
b. It is not related to poor hygiene
c. The most common type is Bullous impetigo
d. It is most common in winter

Q3. Which one of the following interventions for weight reductionis most effective in overweight or obese patients?

a. Low calorie diet alone
b. High intensity exercise programme
c. Exercise combined with a Low calorie diet
d. Low intensity exercise alone

Q4. Which of the following treatments for chronic tension headache has been shown to be effective?

a. Paracetamol
b. Benzodiazepines
c. Amytriptyline
d. Botolinum toxin

Q5. A patient whom you recently diagnosed with type 2 diabetesasks you for advise on purchasing and using a home blood glucose meter. Which of the following is the most appropriate advice?

a. A sufficient blood sample is not significant for an accurate result
b. The International Diabetic Federation recommends that patients with type 2 diabetes check their blood glucose at least three times daily
c. Self monitoring of blood glucose should not be the sole basis for treatment decisions
d. A glucose meter does not meet the standards of the US Food and Drug administration if the results it vary by 10% from laboratory values

Q6. A 31 year old woman is breast feeding her 3 month old baby. She complains of a small, non tender and firm swelling in her neck at the thyroid area. She says to you "I did not expect to loose so much weight from breast feeding". Her thyroid stimulating hormone and antibody titres are low. Which of the following is the most appropriate next step to take?

a. Thyroid uptake scan
b. Start treatment with beta blockers
c. Starting treatment with neomercazole
d. Treatment for Graves disease as soon as the patient stops breastfeeding

Type II Questions

Each question may have more than one correct answer

Q7. Which one of the following treatment regimes is/are recommended for patients suffering from impetigo?

a. Amoxycillin+clavulanate
b. Oral Cephalosporins
c. Topical antiseptics
d. Topical Mupirocin

Q8. Principles of pain management in Palliative care
Which of the following statements is/are correct?

a. All patients with moderate to severe cancer pain should receive a trial of opioid analgesia
b. A patient's treatment should start at the level of the WHO analgesic ladder appropriate for the severity of pain
c. Analgesia for continuous pain should be prescribed on a regular basis and "as needed" for "breakthrough pain"
c. For uncontrolled moderate to severe pain, if two tablets of Co-codamol (60mg codeine/1000mg paracetamol) approximately equivalent to 5mg of morphine, are not enough, one may titrate the 4 hourly morphine dose upwards by 30-50% every 24hrs

Q9. The effects of medication may be influenced by which of the following issues:

a. Drug interactions
b. Individual genetic makeup
c. Organ function
d. Age of patient

Q10. Studies of the upper urinary tract in a 45 year old man with significant microscopic haematuria were negative. Which of the following is/are advisable for the evaluation of the lower urinary tract.

a. Intravenous urography
b. Magnetic resonance imaging
c. Urine cytology
d. Cystoscopy

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caused by Human Papillomavirus Types 6, 11, 16, and 18.

SILGARD® is a vaccine for the prevention of high-grade cervical dysplasia (CIN2/3), cervical carcinoma, high-grade vulvar dysplastic lesions (VIN 2/3), and external genital warts causally related to Human Papillomavirus (HPV) types 6,11,16,18. The indication is based on the demonstration of efficacy of SILGARD® in adult females 16 to 26 years of age and on demonstration of immunogenicity of SILGARD® in 9- to 15-year old children and adolescents.

As with any vaccine, vaccination with SILGARD® may not result in protection in all vaccine recipients. The vaccine is therefore not indicated for treatment of cervical cancer, high-grade cervical, vulval and vaginal dysplastic lesions or genital warts

Now is the time to vaccinate girls and young women 9 to 26 years of age

ABRIDGED PRESCRIBING INFORMATION: SILGARD® Human Papillomavirus Vaccine [Types 6, 11, 16, 18] (Recombinant, adsorbed). Refer to Summary of Product Characteristics for full product information. **Presentation:** Silgard is supplied as a single dose pre-filled syringe containing 0.5 ml of suspension. Each dose of the quadrivalent vaccine contains highly purified virus like particles (VLPs) of the major capsid L1 protein of Human Papillomavirus (HPV). These are type 6 (20 µg), type 11 (40 µg), type 16 (40 µg) and type 18 (20 µg). **Indications:** Silgard is a vaccine for the prevention of high-grade cervical dysplasia (CIN 2/3), cervical carcinoma, high-grade vulvar dysplastic lesions (VIN 2/3), and external genital warts (condyloma acuminata) causally related to Human Papillomavirus (HPV) types 6, 11, 16 and 18. The indication is based on the demonstration of efficacy of Silgard in adult females 16 to 26 years of age and on the demonstration of immunogenicity of Silgard in 9- to 15-year old children and adolescents. Protective efficacy has not been evaluated in males. The use of Silgard should be in accordance with official recommendations. **Dosage and administration:** The primary vaccination series consists of 3 separate 0.5 ml doses administered according to the following schedule: 0, 2, 6 months. If an alternate vaccination schedule is necessary, the second dose should be administered at least one month after the first dose and the third dose should be administered at least 3 months after the second dose. All three doses should be given within a 1 year period. The need for a booster dose has not been established. **Paediatric population:** Silgard is not recommended for use in children below 9 years of age due to insufficient data on immunogenicity, safety and efficacy. The vaccine should be administered by intramuscular injection. The preferred site is the deltoid area of the upper arm or in the higher anterolateral area of the thigh. Silgard must not be injected intravascularly. Subcutaneous and intradermal administration have not been studied, and therefore are not recommended. **Contraindications:** Hypersensitivity to the active substances or to any of the excipients. Individuals who develop symptoms indicative of hypersensitivity after receiving a dose of Silgard should not receive further doses of Silgard. Administration of Silgard should be postponed in subjects suffering from an acute severe febrile illness. However, the presence of a minor infection, such as a mild upper respiratory tract infection or low grade fever, is not a contraindication for immunization. **Warnings and precautions:** As with all injectable vaccines, appropriate medical treatment should always be readily available in case of rare anaphylactic reactions following the administration of the vaccine. As with any vaccine, vaccination with Silgard may not result in protection in all vaccine recipients. Also, Silgard will only protect against diseases that are caused by HPV types 6, 11, 16 and 18. Therefore, appropriate precautions against sexually transmitted diseases should continue to be used. Silgard has not been shown to have a therapeutic effect. The vaccine is therefore not indicated for treatment of cervical cancer, high-grade cervical, vulvar and vaginal dysplastic lesions or genital warts. It is also not intended to prevent progression of other established HPV related lesions. Vaccination is not a substitute for routine cervical screening. Since no vaccine is 100% effective and Silgard will not provide protection against non-vaccine HPV types or against existing HPV infections, routine cervical screening remains critically important and should follow local recommendations. There are no data on the use of Silgard in subjects with impaired immune responsiveness. Individuals with impaired immune responsiveness, whether due to the use of potent immunosuppressive therapy, a genetic defect, Human Immunodeficiency Virus (HIV) infection, or other causes, may not respond to the vaccine. This vaccine should be given with caution to individuals with thrombocytopenia or any coagulation disorder because bleeding may occur following an intramuscular administration in these individuals. The duration of protection is currently unknown. Sustained protective efficacy has been observed for 4.5 years after completion of the 3-dose series. Longer term follow-up studies are ongoing. The data on Silgard administered during pregnancy did not indicate any safety signal. However, these data are insufficient to recommend use of Silgard during pregnancy. Vaccination should, therefore, be postponed until after completion of pregnancy. Silgard can be given to breastfeeding women. **Undesirable effects:** Very common: pyrexia and at the injection site: erythema, pain, swelling. Common: at the injection site: bleeding, pruritus. In addition, in clinical trials adverse reactions that were judged to be vaccine- or placebo-related by the study investigator were observed at frequencies lower than 1%: rare: urticaria and very rare: bronchospasm. **Package quantities:** Single pack containing one 0.5 millilitre dose pre-filled syringe with a needle guard and two needles. **Marketing authorisation holder:** Merck Sharp & Dohme Ltd, Hoddesdon, Hertfordshire EN11 9BU, United Kingdom. **Marketing authorisation number:** EU/1/06/358/001. **Legal category:** POM. **Date of last revision of the text :** September 2006.

Before administering Silgard®, please read the Physician Circular.

SILGARD®

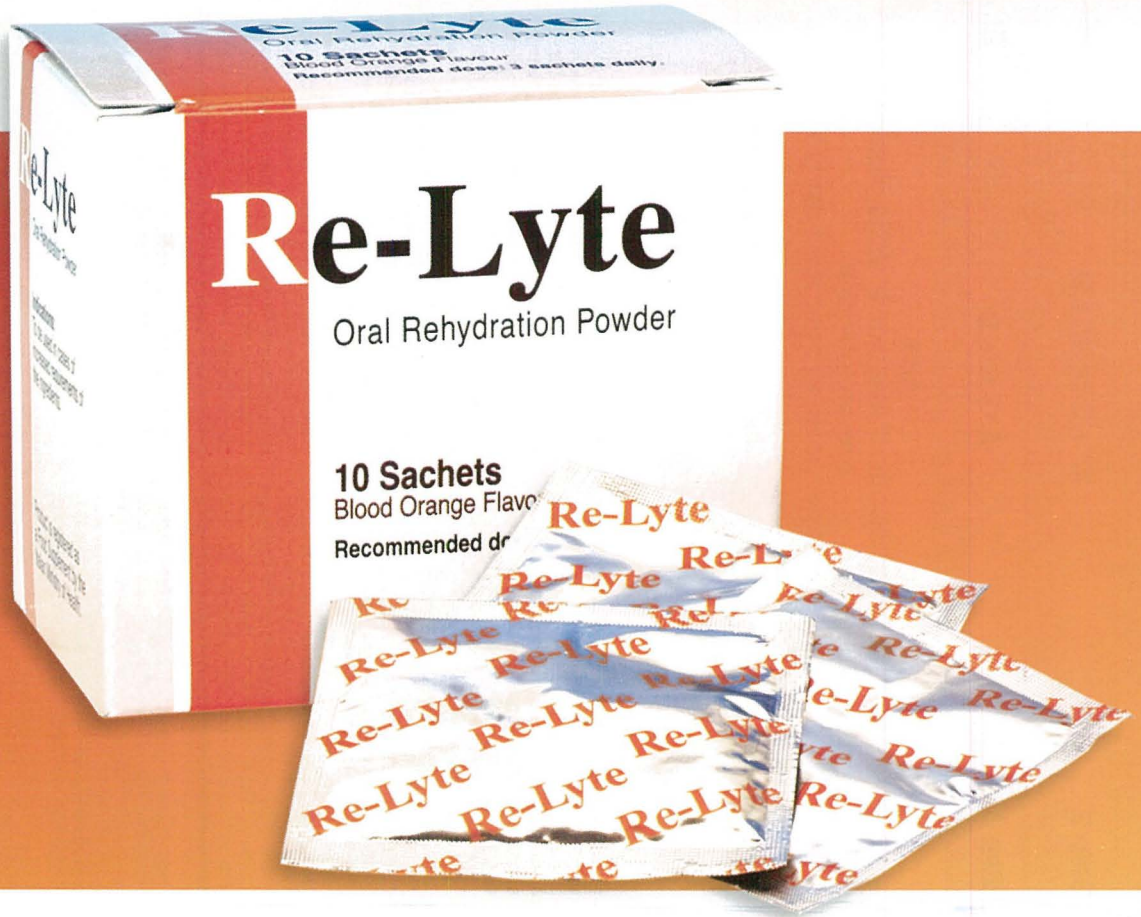
[Quadrivalent Human Papillomavirus (Types 6, 11, 16, 18) Recombinant Vaccine]

Today, you can do more

SILGARD® is a registered trademark of Merck & Co., Inc., Whitehouse Station, NJ, USA

MSD

Jan 2007 GRD-2006-MEA-ICY-MA-1108-J



Re-Lyte

10 Oral Rehydration Sachets

PROPERTIES

Available in blood Orange Flavour.
Contains all the necessary salts to manage dehydration.
With added vitamin B6 which has non specific anti emetic action.

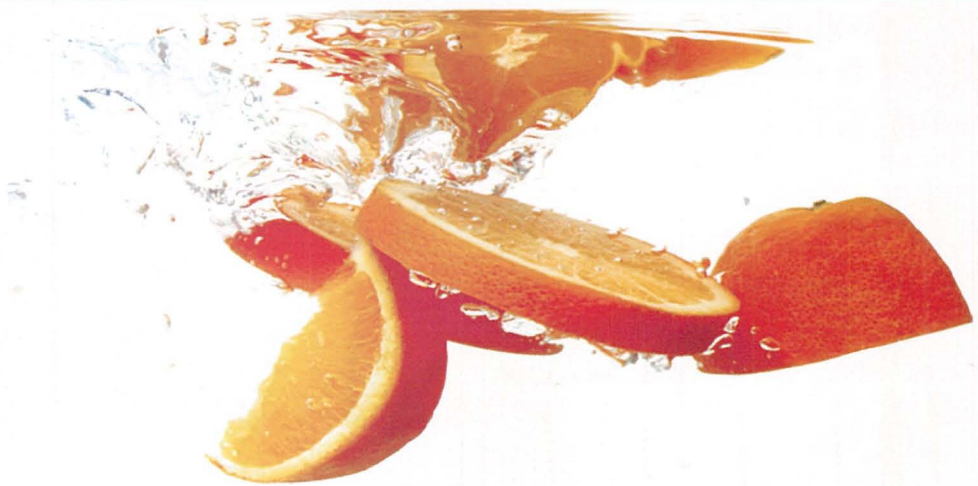
INDICATIONS

To be used in cases where the replenishment of salts is necessary.

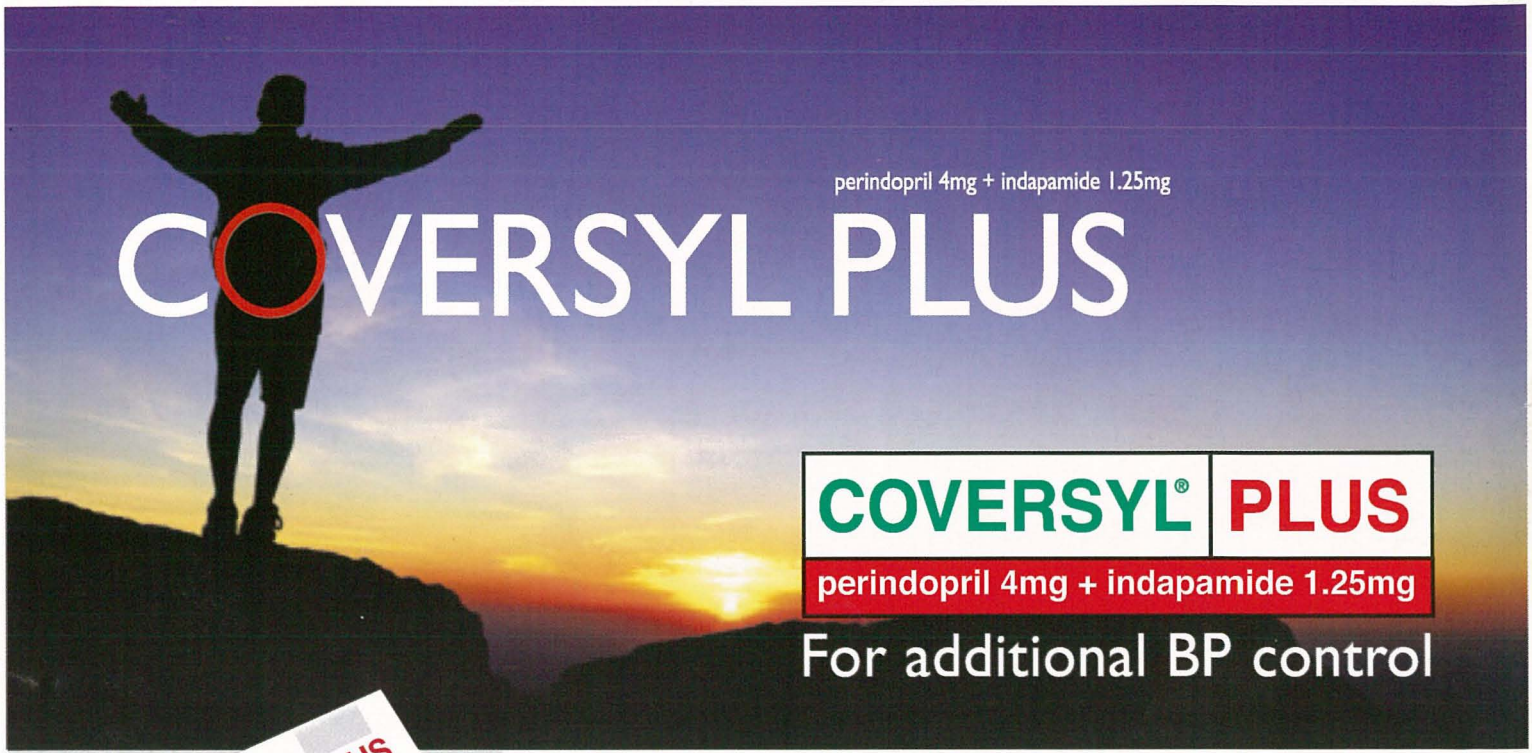
DIRECTIONS

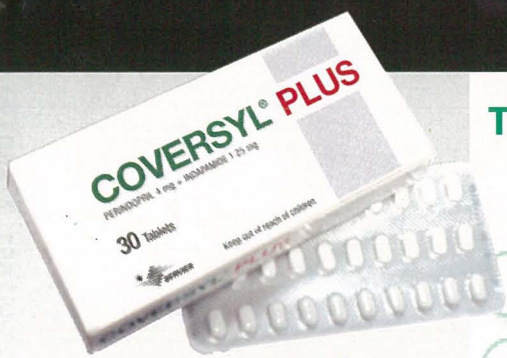
Mix contents of 1 sachet in 200mls of water, stir to dissolve.

COMPOSITION	per sachet
Anhydrous glucose	2000mg
Trisodium citrate dehydrate	520mg
Sodium Chloride	480mg
Potassium Chloride	280mg
Vitamin B6	0.666mg



Pro-Health 75, Dun Loret Callus Street, Zebbug ZBG 2494, Malta.TEL: (356) 21461851, 21460194, FAX: (356) 21462653 EMAIL: info@pro-health.com.mt





NOW AVAILABLE IN MALTA

The **NICE/BHS** hypertension guidelines[1]

	Younger than 55 years	55 years or older or black patients of any age
Step 1	A*	C or D
Step 2	A* + C or A* + D	
Step 3	A* + C + D	
Step 4	Add ♥ further diuretic therapy or ♥ alpha-blocker or♥ beta-blocker **Consider seeking specialist advice**	

Abbreviations: A=ACE inhibitor (*consider angiotensin receptor blocker if ACE intolerant)

1. Hypertension Management of hypertension in adults in primary care

COVERSYL® PLUS Tablets

Prescribing Information. Refer to Summary of Product Characteristics (SPC) before prescribing. **Presentation**: Tablets containing 4mg perindopril tert-butylamine salt and 1.25mg indapamide. **Indications**: Essential hypertension where blood pressure is not adequately controlled on perindopril alone. **Dosage and administration**: One tablet per day preferably taken in the morning, before a meal. Renal insufficiency (clcr ≥30 ml/min, <60ml/min): Start treatment with an adequate dose of the free combination. Monitor creatinine and potassium. Children: Coversyl Plus is not recommended. **Contraindications**: Hypersensitivity to perindopril, any other ACE inhibitor or sulphonamides. History of angioneurotic oedema with previous ACE inhibitor therapy. Hereditary/idiopathic angioneurotic oedema. Severe renal impairment (clcr < 30 ml/min). Bilateral renal artery stenosis or single functioning kidney. Hepatic encephalopathy. Severe hepatic impairment. Hypokalaemia. Hyperkalaemia. Patients on dialysis. Untreated decompensated heart failure. Combination with non-antiarrhythmics which cause torsades de pointes. Pregnancy/ lactation. Potassium supplements and potassium-sparing diuretics are not recommended. Serum lithium concentrations may rise during lithium therapy; combination not recommended. **Precautions**: Assess renal function and potassium before and during treatment, particularly in the elderly or in patients with renal insufficiency/ renovascular hypertension. Monitoring plasma potassium is particularly important in patients in whom hypokalaemia presents a risk e.g. in diabetic patients (whose blood glucose should also bemonitored) or those with a prolonged QT interval. Unsuitable for use in patients with hyperkalaemia. Plasma sodium should be measured before and at intervals during treatment. Risk of sudden hypotension: in patients who are volume depleted, receiving diuretics or suffering from severe heart failure; in presence of pre-existing sodium depletion (especially in renal artery stenosis) – monitor electrolytes regularly. Surgery/ anaesthesia: Hypotension may occur. Reduction in glomerular filtration due to hypovolaemia may worsen renal insufficiency. Risk of neutropenia in immunosuppressed patients, especially those with renal impairment associated with collagen vascular disease, reversible after discontinuation. Risk of anaphylactic reactions during desensitisation with bee/wasp venom or during dialysis with high flux membranes or LDL apheresis with dextran sulphate absorption; withdraw Coversyl Plus at least 24 hours before treatment. In hepatic impairment, encephalopathy may occur; if so stop Coversyl Plus immediately. Aortic stenosis/hypertrophic cardiomyopathy: Use with caution. Gout attacks may increase in hyperuricaemic patients. Transitory rise in plasma calcium may occur. **Interactions**: Co-administration with drugs prolonging the QT interval is not recommended. Combination with antidiabetic agents may increase the hypoglycaemic effect. Combination with other antihypertensive agents, certain anaesthetics, neuroleptics or imipramine-type drugs may increase the hypotensive effect. Increased risk of leucopenia in combination with allopurinol, immunosuppressants or procainamide. Caution required in coadministration with NSAIDs, high dose salicylates, metformin, compounds causing hypokalaemia, baclofen, digitalis, iodinated contrast media, calcium salts, cyclosporin, corticosteroids and tetracosactide (i.v.). **Side effects:** Hypotension, cough, asthenia, dizziness, headache, disturbance of mood and/or sleep. Taste impairment, dry mouth, nausea, epigastric pain, constipation, abdominal pain, anorexia, muscle cramps, paraesthesia. Localised skin rashes. Hypersensitivity reactions, worsening of acute disseminated lupus erythematosus. Angioneurotic oedema: Discontinue treatment immediately. Rarely, pancreatitis, hypercalcaemia. Reversible increases in blood urea and creatinine may be observed. Hypokalaemia, hyponatraemia, hypovolaemia, increased plasma uric acid and blood glucose. Very rarely haematological disorders. Consult SPC for full list of side effects. **Legal category**: POM Product **Licence Number**: MA 066/00301. **Further Information**: website at **www.servier.com**; Les Laboratoires Servier, France. Tel +33 (0) 15572 6000. **Date of revision**: March 2007.

www.servier.com

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