THE HISTORY OF GYNAECOLOGY IN MALTA
C. Savona-Ventura
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INTRODUCTION
MALTESE GYNAECOLOGY

Since gynaecological maladies, of certain types at least, follow childbirth, the history of gynaecology has always been closely associated with that of midwifery, but the speciality only moved ahead in the first half of the nineteenth century. The progress in obstetrics was dependent on the ability of man to analyze, deduce logically and profit by experience, while gynaecology was more dependent on scientific discoveries. Prior to the mid-nineteenth century, the speciality consisted of treating disorders of menstruation, displacements of the uterus, and pelvic aches and pains connected with so-called peri- and para-metritis. The treatment consisted mostly of clysters, blisters, setons, pessaries, and cervical cauterization. The term gynaecology was first used in 1847.

The nineteenth century had an auspicious beginning for the speciality when Ephraim McDowell in 1809 performed successfully the first ovariotomy in Kentucky. It was not too many years after that a number of other cases were reported from around the world. In the United Kingdom, the first successful operation was performed by William Jeaffreson in 1836, but it was Charles Clay of Manchester who is credited more than anyone else for placing this operation on a sure foundation. Thomas Spencer Wells, who spent six years as a Naval Doctor in Malta, did his first ovariotomy in 1857 and by 1880 was performing his thousandth one. In Malta the first ovariotomy was performed
by Prof. G.B. Schembri in November 1890 \(^3\). The success in ovariotomy, combined with the concurrent introduction of asepsis and anaesthesia, sparked off an enthusiasm for further advances in gynaecological surgery.

Neolithic man in Malta, with his Fertility cult, was familiar with the anatomy of the external genitalia as evidence by the prominent depiction of the female external genitalia in a number of figurines and the phallic symbols representing the male organ \(^4\). The first evidence of gynaecological interest in Malta is the engraving depicting a vaginal speculum from a Roman period catacomb dated to the second century AD. The carving is one of a group depicting a number of surgical instruments. The vaginal speculum depicted shows a lower middle vertical ridge which denotes the screw mechanism which when turned separated the two blades of the priapiscus which thus expanded the vagina. This instrument was made of different sizes according to the age of the patient \(^5\). The vaginal speculum was definitely known to the Romans. Galen (130-200 AD) was the first to mention the use of the speculum, while Soranus (98-177 AD) wrote an entire chapter on the speculum in his book on gynaecology. In 1818, two specula were found in the excavations of Pompeii dated 79 AD. These were beautifully made bronze dilators, one containing three blades, the other four blades which diverged when a centrally located screw was turned \(^6\).

Early reports of gynaecological bearing in Maltese medical history include cases of infertility and intersex. A case of infertility caused by hypospadias was reported in 1542 in a case of marriage annulment. The case appeared
before the Ecclesiastical Court who appointed two doctors as court experts. Drs. J Callus and R de Bonellis examined the male partner of the marriage and confirmed that consummation was impossible owing to his genital malformation described as severe hypospadias. A case of intersex resulting in a legal change of sex was recorded in 1744, when a 17 year old girl was brought before the Grand Court who appointed two medical experts. The girl was found to have a small penis with two folds on each side stimulating labia but containing testis. There was a narrow aperture between the two folds which did not allow the introduction of the small finger - a description suggesting severe hypospadias. The doctors decided that the dominant sex was male but examinee was infertile. The ruling was confirmed by a second set of seven experts. In 1756, another annulment suit appeared before the Ecclesiastical Court where the husband was accused by his wife of being impotent. Four doctors were appointed as court experts. The husband had a rather thin voice for a male, but the brevity and thinness of his genitalia were more than sufficient to enable coitus. Fertility was an important aspect of life in bygone days. An 1592 inventory of the Santo Spirito pharmacy included the vetch plant belonging to the bean family Cecena (cicer). The red variety of this plant was administered in the form of an electuary to stimulate coitus and sperm formation. Other preparations used to promote the onset of menses are listed. These include (1) Pille deserapin (Pillae de sagapeno) made of the gum of Sapapenum officinale, Calamus aromaticus, colocynth and aloes; (2) Antidotu emagogu (Antidoto emmenagogo) made up of fourteen constituents including cassia, black hellebore, liquorice and anise;
and (3) Calamo arom. (Calamo aromatico) made up of the roots of sweet flag Acorus calamus or Caklamus aromaticus. 10

Medical practitioners were apparently conversant with the current knowledge relating to gynaecology and reproductive function. Callus and de Bonellis in the mid-sixteenth century appeared to be well acquainted with medieval thought quoting in their report the views of Galen (131-200 AD), Rhazes (860-932 AD), Avenzoar (1072-1162 AD) and Avicenna (980-1037 AD) 11. In 1740 Giorgio Locano, subsequently appointed Professor of Medicine in Malta in 1771, published his work on the physiology and anatomy of the female reproductive organs entitled Dissertatio physiologica de mechanico feminarum tributo at Montpelier in 1749. 12. In his lectures to medical students, Dr. F Butigieic included the subject of pelvic anatomy, quoting Gabriello Fallopius (1523-1562) description of the anatomy of the Fallopian tubes, William Harvey (1578-1657) description of the anatomy of the human ovary, and Caspar Bartholin (1655-1738) description of the anatomy and function of the vaginal glands. 13. In 1843 Prof. S Arpa reviewed the clinical features of uterine fibroids and ovarian tumours particularly when these complicated pregnancy 14. In 1860, the Department of Anatomy acquired paper mache models of different stages of the development of the human ovum, of the generative organs and of the abnormal forms of the pelvis 15. In their lectures to midwives, Profs. S.L. Pisani in 1883 and G.B. Schembri in 1896-97 both included sections describing the anatomy of the pelvis and pelvic organs, besides an account of the physiology of menstruation 16.
There is scant information about gynaecological practices in Malta prior to the twentieth century. Venereal disease has long been a recognised problem on the Islands. A prescription list for Santo Spirito Hospital dated 1546 records the treatment for venereal disease (*morbo gallico*), while the accounts records of 1544 it is recorded that treatment for venereal disease was ordered for two females. A similar authorization is recorded in 1547 for four other women. The treatment recorded included various *unguenta vulneria* like *Aegyptiaco* and *Masticino* for local lesions. *Digestivi 1 2 3 4 5 contra morbo gallico* were also given. These were liquid ointments made from turpentine and tincture of aloes administered to free wounds from pus. Excavations at 15th century church of Hal Millieri yielded skull remains buried before 1636 which showed erosions consistent with syphilis. The advent of the Knights of St John and the establishment of the Islands as a maritime base brought prostitution to the Islands. As early as the sixteenth century, the local physicians were familiar with the clinical manifestations of venereal disease, though they could not differentiate between gonorrhoea and syphilis. They knew that the *morbus gallicus* was contracted through sexual intercourse and that the enlargement of the inguinal glands could be one of its signs. By 1596 the number of affected individuals was so large that the question of providing a place for treatment was brought up. Provision for the treatment of venereal disease in hospital dates from the seventeenth century when a small building adjoining the Woman's Hospital in Valletta, known as the *falanga*, was set up for female patients. The *falanga*, expanded to care for male and female patients, was relocated to new premises in 1682. It continued to function until 1798. Another hospital - Loch Hospital - was opened in 1861. Treatment was based on the administration of mercury and hot-air baths. Keiser's pills, the
composition of which remained secret, were also administered to patients. In 1762 Dr. Fortunato Antonio Cren wrote a Latin treatise on the disease entitled *Tractatus physico-medicus de Americana lue*, explaining its origins, describing its manifestations and method of propagation. He condemned the employment of crude mercury in its treatment because of its dangers and recommended the oral use of corrosive sublimate dissolved in *spiritus frumenti* to neutralize its injurious effects. The risks of acquiring syphilis by midwives during vaginal examinations was commented upon by the medical journal *La Salute Publica* in 1897. It advised midwives to wash their hands carefully after examinations. In 1922 cases of syphilis were made to undergo a complete course of novarsenobillon besides mercurial and potassium iodide treatment. Gonorrhoea was one of the first infections in Malta to be treated by antimicrobials in the form of Prontosil after the introduction of this drug in 1935.

In 1871, the medical journal *Il Barth* accused some midwives of posing as doctors prescribing medicine for dysmenorrhea and other complaints, besides pretending to correct uterine malposition. In the late nineteenth century Prof. G.B. Schembri is known to have prescribed tincture of ergot for bleeding of uterine pathology and potassium iodide for leucorrhrea. In his book to midwives he also advises vaginal irrigations with warm water and borax for hives and other infectious vaginal discharge, for an abundant fetid leucorrhrea, and for organic disease of the womb such as cancer. Contraception was apparently limited to *coitus interruptus* and other forms of unnatural sex. In the late eighteenth century an Augustine friar made it a point to ask his women penitents whether their husbands had unnatural
intercourse with them \textsuperscript{20}, while Prof. Schembri considered this practice harmful by causing gradual and increasing congestion of the womb thus causing many ailments to the internal genitalia leading to invalidism \textsuperscript{21}. Leaches were apparently applied to the lower abdomen to provoke menstruation, and to relieve pain and congestion. Pelvic inflammatory disease during the late nineteenth century were apparently frequently encountered problems. These were generally managed conservatively with opiates and fomentations, though faradism was introduced in the management of this condition in 1890 \textsuperscript{22}. Gynaecological instruments in use at the turn of the nineteenth century, held at the Malta Medical School Old Instruments Collection, included a variety of vaginal speculæ, metrotones, uterine sounds, and pessaries.

\textbf{GYNAECOLOGICAL INSTRUMENTS}

\begin{tabular}{|l|}
\hline
\textit{SPECULÆ} - Recamier's, Madam Boivin's, Ricord's two-bladed, Coxeter's screw-like with obturator, Weiss three-bladed, Plum's three-bladed with obturator, Meadow's four-bladed, Meadow's three bladed, Nott's three-bladed, Cusco's Duckbill, Jobert's boxwood tubular with obturator, Vaginal bath, Marion Sims double-ended duckbill, Ferguson gum-coated glass, Ferguson metal tubular patterns. \\
\hline
\textit{METROTOMES} - Simpson's, Greenhelgh's bilateral metrotoine, Hall's uterine scarifying lancet. \\
\hline
\textit{PROBES / SOUNDS} - Placyfair's uterine probe, Simpson uterine sound, Jointed Simpson uterine sound, Marion Sims uterine elevator. \\
\hline
\textit{OTHER INSTRUMENTS} - Zwancke's pessary for prolapse, uterine sponge holder, uterine caustic holder. \\
\hline
\end{tabular}
On the 21 November 1890 Prof. Schembri performed the first laparotomy under chloroform anaesthesia. The patient was diagnosed to have a large ovarian tumour with ascites. After rigorous asepsis and induction of anaesthesia, an infra-umbilical mid-line incision was made. A right sided mass weighing $10^{\frac{1}{2}}$ pounds was excised, the pedicles being ligated with silk sutures. The abdomen was closed with interrupted sutures, the total operation being undertaken in 35 minutes. The postoperative course was turbulent complicated by ileus diagnosed as resulting from intestinal torsion. This was managed conservatively. The woman was discharged four weeks after surgery. The histological diagnosis was that of a cystic adenoma of the ovary.

The problem of genital prolapse received scant mention, though instructions aimed at preventing perineal lacerations during delivery had been given to medical students and presumably to midwives by Dr. Butigiec as early as 1804. These instructions were repeated by Profs. Pisani and Schembri in their lectures to midwives. Prof. Schembri in 1896 also outlines the postoperative care of women who required perineal suturing for a tear during delivery. Dry cotton wool or gauze medicated with iodoform was to be constantly applied over the sutured vagina and perineum, changing the dressing every time it gets soiled. The genitals were to be washed with boracic acid solution each time the patient opened her bowels. Repeated catheterization was advocated to avoid soiling with urine, while the lower limbs were to be kept together by a bandage tied round the knees.
After the introduction of operative gynaecology in Malta at the end of the nineteenth century, further progress was made in the specialty. Forty-five years later the number and variety of gynaecological surgery had increased. Prof. J. Ellul in papers read to the Camera Medica after 1930 presented a case of a Werthiem operation for cervical carcinoma complicated by *Clostridium welchi* (gas gangrene) infection. In the pre-Second World War period 1937-38 the Gynaecological Ward in the Central Hospital at Floriana consisted of a medium sized ward with 11 beds which frequently required augmentation to 16 or more. The hospital served all the gynaecological cases in Malta and some from Gozo. During these two years there were a total of 1189 admissions of which 525 were operated upon. The mortality was only 12 cases, of which only seven were postoperative.

The abdominal operations recorded during these two years included subtotal and total hysterectomies with/out salpingo-oophorectomies, Werthiem's radical hysterectomies, myomectomies, ovarirotomies, and shortening of the round ligaments. These were undertaken for a variety of indications generally uterine fibroids, ovarian tumours or other pathology, cervical malignancy, fibrosis uteri, and rarely pelvic inflammatory disease. When both ovaries were removed in young patients auto-innestation of the ovary in the vulva was done and in some cases hormone preparation injections were given in attempts to prevent osteoporosis. Genital prolapse was generally managed with an anterior and posterior colpoperinorrphy combined with Collin's operation for ventrosuspension. The surgery was performed in two stages, the first whenever possible being performed under local anaesthesia, the latter under general anaesthesia. Le Fort operation was performed in very old
women. Uterine malposition were advised ventrosuspension or a Hodge pessary was introduced after digital correction. Vaginal panhysterectomy was performed for a case of uterine malignancy. Other surgery recorded included plastic surgery for genital fistulae, dilatation and curettage for abnormal uterine haemorrhage, cervical trachelorrhaphy, torsion of uterine polyps, and excision of vulval tumours 27.

Malignant tumours were generally seen at a late stage. Management was very often in these cases palliative against sepsis and haemorrhage with strong fulgurization, strong antiseptic solutions and cupric salts injections. Radium treatment and deep roentgen therapy was still unavailable in Malta, this being only introduced in 1970 at Boffa Hospital at Floriana with patients previous to this being referred abroad. Cervical erosion were managed by three to five applications of thermocoagulation. Cases with pelvic inflammatory disease were managed with antiphlogistic treatment followed by Nauheim baths, medical diathermy and strong iodine treatment. Surgery was undertaken to incise and drain abscess, radical surgery being rarely undertaken 28.

The post-war period saw major advances in surgical practice increasing the safety of surgical procedure through the introduction of safer anaesthesia, blood transfusion, effective antimicrobials, and advances in hormone influencing preparations. In recent years advances in investigative techniques using ultrasonography, computerized axial tomography, and endoscopy have allowed accurate definition of pathology enabling better planned procedures. Screening facilities, particularly for cervical dysplasia, have allowed for the detection of pre-cancerous lesions enabling early effective therapy.
ENDNOTES

2 J.M.N. Kerr et al: ibid, p.359
5 P. Cassar: Surgical instruments on a slab in Roman Malta. Medical History, 1974, 18:p.89-93
6 T. Cianfrani: A short history of obstetrics and gynecology. C.C. Thomas, USA, 1960, p.331
9 Archiepiscopal Archives Melitensis - Super Divortio Inter Alicunda Vella e Alessio Vella, unclassified documents; F. Ciappara: Marriage in Malta in the late eighteenth century. Assoc News Ltd, Malta, 1988, p.69
11 P. Cassar, 1974: op. cit.
15 J.L. Pace: The history of the School of Anatomy in Malta. Royal University of Malta, Malta, 1974, p.16
20 Archivum Inquisitionis Melitensis - Processi 131/4, fol.155r-207r; F. Ciappara: op. cit., p.90
21 G.B. Schembri, 1896: op. cit., p.104
25 G.B. Schembri, 1896: ibid, p.108
27 Annual Report.......1937, ibid; Annual Report.......1938, ibid
28 Annual Report.......1937, ibid; Annual Report ......1938, ibid
Family planning and birth control is today a recognised obligation and right of every family, so that in Malta the mean family size is about four to five individuals. The recognition that family size needs to be controlled by the individual parents was however only accepted by all social partners in the latter half of the twentieth century.

**Pre-twentieth century**

There is little information about the methods of birth control used by the Maltese population prior to the mid-twentieth century. Abnormal intercourse of various forms was probably practised. An Augustian friar in the late eighteenth century made it a point to ask his penitents whether their husbands had had abnormal intercourse with them. Abnormal intercourse was also condemned during the late nineteenth century by the Maltese Professor of Midwifery in his lecture-notes to student midwives basing his objections on medical grounds stating that midwives should be firm in dissuading young married women, from making use of such means often spoken of by their friends to avoid contraception, and must try to impress on their mind, the amount of harm they do themselves by such practice; a gradual and increasing congestion of the womb is the result of these reported habits, which cause many ailments of the internal genital sphere, and which, in time, lead to invalidism.
Other individuals resorted to abortion as a means of fertility control, even though termination of pregnancy was repeatedly condemned by the Maltese ecclesiastical and civil authorities. Termination of pregnancy was and remains illegal and immoral, and during the eighteenth century it was illegal not only to procure or counsel abortion, but also to cultivate abortive plants. A number of cases of procured abortion during the eighteenth century are described, while in 1788 Bishop Labini issued a specific edict against abortion whereby he stated that women were guilty of abortion not only when this was maliciously obtained, but also if they placed themselves in situations which could predispose to spontaneous pregnancy loss.

A 1592 inventory of a Maltese medieval pharmacy list a number of preparations useful to promote the onset of menses. These include [1] Pille deserpapin made of the gum of Sapapenum officinale, Calamus aromaticus, colocynth and aloes; [2] Antidotu emagogu which included cassia, black hellebore, liquorice and anise; and [3] Calomo aromatico made up of the roots of Acorus calamus. Folklore also attributes abortifacent properties to the seeds of the Vervain (Verbena officinalis L., maltese: Buqixrem). While this plant has been attributed with several medicinal uses, it is not generally listed as an abortifacent. Another plant of the same family - the Chaste tree (Vitex agnus-castus L., maltese Sigra tal-Virgi) - was supposed to have properties of decreasing sexual desires. A number of endemic and introduced plants associated with abortion are listed in the Table below.

<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Scientific Name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hairless cotton</td>
<td><em>Gossypium herbaceum</em> L.</td>
<td>Cultivated</td>
</tr>
<tr>
<td>Wild celery, Smallage</td>
<td><em>Apium graveolens</em> L.</td>
<td>Endemic &amp; cultivated</td>
</tr>
<tr>
<td>Fools water-cress, Marshwort</td>
<td><em>Apium nodiflorum</em> (L)</td>
<td>Endemic</td>
</tr>
<tr>
<td>Wild parsley</td>
<td><em>Petroselinum crispum</em> (Mill)</td>
<td>Cultivated naturalised</td>
</tr>
<tr>
<td>Pennyroyal</td>
<td><em>Mentha pulegium</em> L.</td>
<td>Endemic</td>
</tr>
<tr>
<td>Yarrow, Milfoil</td>
<td><em>Achillea millefolium</em> L.</td>
<td>Cultivated</td>
</tr>
<tr>
<td>Ligurian yarrow</td>
<td><em>Achillea ligustica</em> All.</td>
<td>Cultivated</td>
</tr>
<tr>
<td>Feverfew</td>
<td><em>Tanacetum parthenium</em> (L.)</td>
<td>Cultivated</td>
</tr>
<tr>
<td>Wormwood</td>
<td><em>Artemisia absinthium</em> L.</td>
<td>Cultivated</td>
</tr>
<tr>
<td>Yellow aloe</td>
<td><em>Aloe vera</em> (L.)</td>
<td>Cultivated</td>
</tr>
</tbody>
</table>

**MALTESE PLANTS WITH ABORTIFACIENT PROPERTIES**

While the historical records suggest that some forms of family control may have been used by the population, it is unlikely that these practices were widespread. The previous parity structure by age of women delivering in one of the state hospitals on the Maltese Islands in the late nineteenth century suggests that the lower social strata was unlikely to have practised any form of contraception other than a prolonged lactation period. The pattern of previous parity in women delivering in the late nineteenth century is markedly different from that of women delivering in the late twentieth century (Figure 1), with a gradual incremental rise in family size right through the reproductive age during the late nineteenth century contrasting with the plateau reached at by women at 35-39 years of age in the twentieth century 6.
**Twentieth century**

The tendency towards large families was not only the result of inadequate means of contraception available, but also promoted by the dominant quasi-political force of the Roman Catholic Church authorities. Married couples were frequently urged to have large families in order that the heavens receive more baptised souls. The concept of responsible planned parenthood was slowly accepted and promoted by the Roman Catholic Church in the latter half of the twentieth century.

The elucidation of the physiology of the menstrual cycle by K. Ogino of Japan and H. Knaus of Austria in the early 1930s afforded a method of contraception - the safe method - acceptable to the Roman Catholic Church.
In the late 1950s, a survey carried out among Maltese married couples showed that while 82% of the couples knew of the existence of the rhythm method of contraception, only 27% knew how to use it. Subsequent to this study, the Maltese Catholic authorities in 1962 introduced free family planning clinics run under the direction of the Cana Movement. These clinics manned by volunteer doctors promoted only the rhythm method of contraception. In the first two years of operation these clinics dealt with over 1325 cases. The Movement also published a number of information booklets on the subject of the rhythm method of contraception. In the subsequent decades the awareness about the need of family size control increased with a subsequent decrease in fertility rates and the number of births per marriage cohort. The changing attitudes towards controlling family size and the promotion of this trend by the ecclesiastical authorities in Malta contributed towards the fall in fertility rates notable during this period in Malta [Figure 2].
In 1954 G. Pincus and J. Rock carried out field studies in Puerto Rico, Haiti and Mexico in an attempt to develop a pharmaceutical contraceptive. In 1957, Searle applied for permission to market Enovid [10 mg norethinodrel plus 0.15 mg mestranol] which was approved by the Food and Drug Administration in May 1960. Schering was granted approval for Anovlar [4 mg norethisterone acetate plus 0.05 mg ethinylestradiol] in 1961.

By 1966, during the first meeting of the European Congress of Catholic Doctors held in Malta, reference was made by local gynaecologist to the use of oral contraceptive steroids and the moral standpoint of the Roman Catholic Church. A plea was made for the "reappraisal of the place of our 'natural law' argument against progestational steroids when used for fertility control."
Other Maltese doctors participating in the Congress expressed similar views, particularly the use of the progestational agents to prolong the infertile period 9.

The first oral contraceptive to be advertised in the Maltese medical literature in 1967 was Ortho-Novin [2 mg norethisterone plus 0.1 mestranol] marketed by the local agents Hugo Pace & Sons Ltd for Ortho Pharmaceutical Corporation. The preparation was marketed for menstrual cycle control 10. In 1969 Syntex Pharmaceuticals with V.J. Salamone Ltd as local agents advertised Norinyl-2 [2 mg norethisterone plus 0.1 mestranol] and Norinyl-1 [1 mg norethisterone plus 0.05 mg mestranol] in the Maltese medical press, both being marketed as "progestogenic" cycle regulators 11. The first medical review dealing with oral contraceptive treatment appeared in the medical student journal "Chestpiece" in 1971, this paper having been previously presented to the Annual Clinical Meeting of the Association of Surgeons and Physicians of Malta in November 1970 12. The same journal issue also carried an advertisement for Norinyl-1 and Norinyl-2 being still marketed as cycle regulators rather than as an oral contraceptive, an attitude that persisted in the 1973 medical journal issue 13.

The conservative attitude towards the promotion of oral contraceptive preparations in the 1960s and 1970s reflects the general contraceptive attitudes of the general population. In a 1971 survey of 321 women under 45 years of age, some form of family control was being practised by 87%. About one-fourth of those practising contraception used the rhythm method alone, the remainder using methods not approved by the Church, with coitus
*Planned Parenthood in Europe, 1995; 24(1):p.20-22*

...interruptus being the most commonly used. The oral contraceptive was used by only 2% of women (Table 2). In 1976 an article dealing with the symptothermic method of contraception as promoted by the Roman Catholic Church appeared in the Medical students journal 14.

The trend slowly changed in the following decades after the introduction of state-managed family planning clinics in 1982 following pressure by a women’s group Min-naha tan-Nisa. In these clinics all methods of contraception, except termination of pregnancy which remained illegal, were promoted and made available freely. These clinics increased not only the awareness of the need of family size control, but also the awareness of the available methods of contraception 15. Further information on family planning was disseminated by the Parent Craft Lecture program organised by the Midwifery Department for all pregnant women booking for delivery at St. Luke’s Hospital.
The Government-run Family Welfare Clinics were initially managed from three Health Centres or PolyClinics at Floriana, Paola and Mosta. These services were in 1985 extended to a new Health Centre at Gzira, and after 1987 to a purposely-built centre at Qormi. The number of women seeking contraceptive advice seen at these centres increased progressively [Figure 3]. In parallel to these Family Planning Services, the Health authorities also introduced Well Women Clinics in the various Health Centres to screen for cervical and breast cancer. In 1989, the two services were amalgamated into one Well Woman Clinic run from five Health Centres offering cervical cancer screening facilities and family planning advice. This has now been extended to six Health Centres 16.

In a survey of 5286 puerperal women giving birth in 1983, only 8.6% stated that they did not plan to use any form of contraception, while 11.8% planned to use the natural method as recommended by the Roman Catholic Church. Coitus interruptus was the method chosen by 59.2% of women, while hormonal intervention was planned by 5.5%. A similar 5.4% planned to use the IUCD and 6.2% barrier/foam methods. The remainder opted for sterilisation with 1.2% being sterilised at Caesarean Section 17.

In spite of the increasing use of oral contraceptives by the general population which occurred in the early 1980s, it was only in 1988 that the local drug import agency Vivian Commercial Corporation advertised in the local medical press the triphasic preparation Trinordiol [levonorgestrel 0.05/0.075/0.125 mg plus ethinyl oestradiol 0.03/0.04/0.03 mg] marketed by
Wyeth International for specific contraceptive use, while in 1989 Minulet [0.075 mg gestodine plus 0.030 mg ethinyl estradiol] also marketed by Wyeth International was similarly advertised \(^{16}\). The medical representatives of the various local companies importing oral contraceptives preferred a direct approach to medical practitioners rather than advertising in the local medical press. A detailed review of the oral contraceptives in use in Malta appeared in the medical student journal in 1989 \(^{19}\).

The change in attitudes towards contraception is the result of the accelerating process of secularisation that has influenced ideas about marriage and human procreation. A population study showed that 34% of participants ready to obey ecclesiastical authority agreed with the use of artificial contraceptives, as opposed to 68% of person who did not accept ecclesiastical authority. Similar trends were shown in the case of abortion (28% versus 54%) \(^{20}\).

The present Birth Control State services available are managed from the Well Women Clinics run by a Consultant Obstetrician-Gynaecologist from six Health Centres. Further Birth Control advice is given from the Gynaecological Clinics at St. Luke’s Hospital. Educational programs in the form of a lecture given to antenatal patients are organised by the Midwifery Department. All forms of contraceptive methods, excluding pregnancy termination, are discussed with the women attending the various clinics. However the Roman Catholic Church influence is still felt in the overall practice being offered from the State Clinics. The service of IUCD insertion in the state’s family planning clinics, introduced in the 1980s was suspended in 1993 following a concerted outcry in the local newspapers by pro-life
individuals. Furthermore the Church’s objection to sterilisation has similarly influenced its availability in the state hospitals where it is performed only for cases with a medical complication and is not freely available for family control. The Church’s objection to the promotion and use of the condom remains unchanged even in the light of the AIDS epidemic of the last decades. The Church still manages its Family Planning Clinics based on the rhythm method run by the Cana Movement.

In private practice, the medical practitioners offer all forms of birth control, though some methods such as the diaphragm, the vaginal foam and the female condom do not appear to be popular with Maltese women and their importation has been abandoned by the drug importers. Sterilisation is freely available being performed in the various private hospitals in Malta. Pregnancy termination remains illegal, and patients opting for abortion often proceed overseas to Sicily and London to obtain professional services.

<table>
<thead>
<tr>
<th>METHOD</th>
<th>1971</th>
<th>1993</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>12%</td>
<td>14.2%</td>
</tr>
<tr>
<td>Abstinence</td>
<td>1%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Rhythm</td>
<td>40%</td>
<td>19.4%</td>
</tr>
<tr>
<td>Coitus interruptus</td>
<td>70%</td>
<td>40.6%</td>
</tr>
<tr>
<td>Condom</td>
<td>12%</td>
<td>21.9%</td>
</tr>
<tr>
<td>Diaphragm</td>
<td>Low level of use</td>
<td>1.0%</td>
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<tr>
<td>Oral Contraceptive</td>
<td>2%</td>
<td>15.8%</td>
</tr>
<tr>
<td>IUCD</td>
<td>Low level of use</td>
<td>2.9%</td>
</tr>
<tr>
<td>Abortion</td>
<td>Low level of use</td>
<td>0.1%</td>
</tr>
<tr>
<td>Sterilisation - wife</td>
<td>1%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Vasectomy</td>
<td>1%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Other</td>
<td>Low level of use</td>
<td>0.2%</td>
</tr>
</tbody>
</table>

**Contraceptive Use by Method**
A population study carried in 1993 showed that 14.2% of women still practised no form of birth control, while abstinence/coitus interruptus was practised by 48.5%. The rhythm method promoted by the Church was practised by 19.4%. Oral contraceptives were used by 15.8% of the population. The changing trends in birth control methods being used by the Maltese population is evident when one compares the two similar studies carried out in 1971 and 1993 (Table 2) 21.

ENDNOTES

1 Archivum Inquisitionis Melitensis [AIM]: Processi 131A, fols. 155r-207r
4 Ciappara F.: Marriage in Malta in the late eighteenth century. Associated News (M) Ltd., Malta, 1988, p.88

apostolate within the family. Proceedings of the First European Congress of Catholic Doctors. MAM, Malta, 1966, p.172-175
10 St. Luke's Hospital Gazette, 1967, 2(1); St. Luke's Hospital Gazette, 1968, 3(1)
11 2(1); St. Luke's Hospital Gazette, 1969, 4(1); St. Luke's Hospital Gazette, 1969, 4(2); St. Luke's Hospital Gazette, 1971, 6(1); Chestpiece, April 1971, 24:p.8
Savona-Ventura C, 1995b, op. cit. p.30-31
20 Tabone C: The secularization of the family in changing Malta. Dominican Publication, Malta, 1987, p.163

25
SEXUALLY TRANSMITTED DISEASE

Medieval Malta
Illicit promiscuity brought with it the dangers of venereal disease or morbo gallico. The morbo gallico is known to have definitely affected members of the Maltese population during the late medieval period. Skeletal remains excavated from Hal Millieri Church dated to the late medieval-early modern period have included a skull with bone erosions in the parietal bone possibly of syphilitic origin. The origin of syphilis is still disputed. The first unquestionable epidemic of syphilis occurred in Europe at the end of the 15th century. With this epidemic, came a chorus of blames. Travellers were blamed, prostitutes were blamed, soldiers were blamed and Columbus was blamed. By most historical accounts, it does seem that France was the likely starting point for the European epidemic. During Charles VIII's Italian campaign in 1495, his mercenaries returned home with this new sickness. It spread quickly and viciously. By 1497, the disease had spread throughout Europe; and by less than a decade later had spread to nearly all corners of Europe. The French called it the Neapolitan disease, while everyone else called it the French disease. The Muscovites called the disease the Polish sickness, the Poles called it the German sickness.

Some of the Spanish soldiers were noted to have accompanied Columbus on his second voyage, and this gave birth to the notion that syphilis was
originally an American disease introduced into Europe. This led to the
disease being referred to as the American disease. It is however possible that
the treponema micro-organism was prevalent in the European community but
with different pathogenic characteristics. It changed its pathogenic character
and thereafter attacked an unprotected population with devastating effect and
rapidity.

In addition to the skeletal archaeological evidence, the Santo Spirito accounts
register further records that in 1544 two females were prescribed treatment
for the disease. Similarly in 1547 similar authorisation for treatment were
made for two other females and a male individual. The cost of treatment in
all cases was 6 tari 18 grani. The disease also affected members of the higher
society including Magnifico Francesco Ingomes and the dominican Padre
Giuseppe Scicluna who received private treatment ². The prescribed
treatment consisted of unguenta vulneraria like Aegypcaico and Masticino
for the management of venereal lesions. Furthermore ointments made from
turpentine and aloes tincture [digestivi 1 2 3 4 5 contra morbo gallico] to
free wounds from pus were also applied ³.

**Hospitaller Malta**
The ceding of the Maltese Islands to the Knights of the Order of St. John of
Jerusalem in 1530 resulted in a significant upsurge in the population not
simply by the members of the Order themselves but also by their entourage
of servants and slaves, and accompanying families from Rhodes. The Knights
entourage included several mistresses and concubines.
The generalised promiscuity engendered by the lax morals and continued presence of prostitutes and courtesans on the Islands created an ideal environment for the spread of venereal disease. Archaeological and documentary evidence for the presence of the morbo gallico in the Maltese community during the late Medieval and Early Hospitaller Periods has already been described. The presence of the morbo gallico among the population in the 16th century is evidenced by the fact the local physicians initially mistook for venereal disease the swollen inguinal glands in cases of plague during the 1592 epidemic. By 1596, the Council of the Order was deliberating the provision of a permanent place for the treatment of the morbo gallico, however provision for a specific ward for the treatment of the condition was made only in the seventeenth century. This consisted of a small building known as the Falanga adjoining the Casetta delle Donne, which accommodated female patients suffering from the disease. By 1679, this arrangement was considered to be unsuitable, and a proposal was made to set up a ward in the Sacra Infermeria to replace the old Falanga. The new accommodation was functioning by 1682. By 1787, the new Falanga had grown into an irregularly shaped annex situated at the back of the Great Ward of the Sacra Infermeria. The Falanga had rooms for mercurial inunction of both sexes and was further provided with hot-air rooms. This treatment was managed by the stufarola or stream-bath attendant. During 1787, the total number of patients that received treatment amounted to 356 individuals including 193 foreigners. In the subsequent year the number had fallen to 293 with 160 foreigners.
Before undergoing treatment, all patients were examined by the Principal Surgeon and Principal Physician. Those found suffering from gonorrhoea were managed on an outpatient basis. Married men found to be suffering from the disease were only treated if their wives also presented themselves for treatment. A special female attendant called *spalmante* or *spalmiatora* was employed to look after the patients undergoing mercurial ununction. The treatment was actually administered by convicts or Christian slaves who were paid a *tari* daily, besides receiving three white loaves and a small measure of wine. The administration of mercury was not without hazards for the carers. In 1786, the *spalmante* Anna Maria Alessi employed during the period 1749-1786 petitioned for the transfer of her duties to her 13-year old daughter since "she no longer remained capable of administering the mercurial inunctions, so much so that her patients were never completely cured and they had to return to hospital for further treatment after a short time." The treatment for the *morbo gallico* concentrated primarily towards the primary lesion with the application of various *unguenta vulneraria* and *digestivi*. Paracelsus during the early 16th century popularised the use of mercury for managing the primary lesions of syphilis. Ore cinnabar had been used in the 1300s for the treatment of various skin disease including leprosy. The application of the ointment to syphilitic lesions was an obvious choice and started being used after 1496. Mercury was administered in the form of ointments, oral administration, and vapour baths. This effective though toxic therapeutic measure was introduced in the pharmacological armamentarium of the physicians at the *Sacra Infermeria*. In 1762, the Physician on the
Order's galleys Fortunato Antonio Cren published *Tractatus physico-medicus de Americana Lue, ac omnium Tutissima curandi Methodo Mercurii Sublimati corrosivi ope* [Malta, 1762]. This publication was apparently criticized by an unidentified *melitensem doctorem*, a criticism that elicited a response by Dr. Cren who published *Responsio ad epistolam in Tractatu physico-medico* [Catania, 1764]. Dr. Cren further mentions the use of Keiser's pills, of unstated composition, that were being administered to patients suffering from syphilis. Dr. Cren recommended the use of the sublimate of mercury dissolved in *spiritus frumenti*, in lieu of employing crude mercury. The contemporary eighteenth century surgeon Dr. Michelangelo Grima noted that syphilis, like scurvy, was likely to retard the healing of wounds. He thus recommended that injured patients suffering from syphilis were to receive specific treatment for the disease. Because of the toxic effects of mercurial medications, Grima proposed the use of a decoction made from the sarsaparilla plant. Anti-venereal treatment was considered harmful if administered during the summer months, a belief that required the closure of the *Falanga* during this period. Regular mercurial applications in the management of syphilis was detrimental to the health of the patients, and probably augmented the nervous system effects of tertiary syphilis. The disease and its complications, including therapeutic, spared no one. In 1716, Giacomo Capello reported how Grand Master Ramon Perellos became paralysed through the overuse of mercury for exceeding in chastity. The Maltese form of syphilis may have been a particularly virulent form. An anonymous author in 1679 wrote that "There is no place in the whole world where venereal disease attacks faster and spreads easier than in Malta, for here it is a compound of all the poxes in the world." The Physician
accompanying the French troops Claude Etienne Robert commented that "la maladie venerienne y est tres repandue et commune; elle complique la plupart des autres maladies. La petite-verole reste plusieurs annees, quelquefois dix ans, sand y paroitre; mais quand elle y existe, elle est meurtriere, et fait de grande ravages" 15. A Mattia Preti [b.1613; d.1699] painting depicting "St. Jerome and the last trumpet" in the artistic realism practice of the seventeenth century illustrates the main protagonist with a thoracic aneurysm typical of tertiary syphilis together with gummata over the sternum 16.

The Order's rule in Malta came to an end when they were ousted by Napoleon Bonaparte in 1798. After only a few months, the Maltese rose against their French rulers and blockaded the garrison in the Grand Harbour fortified towns. The latter event disrupted civil life in Malta. The civil strife and blockade lasted two years. Soon after taking over the Sacra Infermeria to serve as a military hospital for the French troops, the Falanga ward, housing 120 beds, was modified with the provision of large windows and connected to the Great Ward to increase the number of beds available for febrile patients 17. Venereal disease soon became evident after the arrival of the French troops. It reached such significant proportions that the monastery of St. Scolastica and the Anglo-Bavarian Auberge were converted into venereal hospitals to treat the French troops 18. In an attempt at controlling the spread of this disease and in addition decease the dependants in the fortified cities, General Vaubois on the 16th December 1798 proclaimed that "toutes les femmes dont les maris sont absens, les veuves et les filles faisant la metier de tricoteuses, fileuses, blanchisseuses ou couturiere, se rendront demain a` une heure apres-midi avec leurs effets,
savoir celles de la citte’ de l'ouest (don’t la Florianna fait partie) sur la place de la liberte’, et celles de la citte’ de l'est chez le commandant, elles seront conduites de suite aux portes et mises dehors.”

By banishing all women whose husbands were absent from the cities, Vaubois hoped to banish all prostitutes to the countryside sending them as "a nice gift to the insurgents".

**British Period**

With the capitulation of the French in 1800, the Maltese Islands eventually fell under the dominion of the British sphere of influence serving as a link within the British Empire. This placed the Islands in an important point the net of maritime communications, opening the community to the spread of specific diseases including venereal ones.

In line with the ordinances promulgated by the Order, the periodical examination of prostitutes by the Police Physician continued to be enforced. Until May 1832, these women were examined in a building situated in *Strada Tramontana* in Valletta. However, it was noted that that "indecencies" were occurring on those days when examinations were scheduled. It was therefore resolved to transfer the clinic to a ward under the venereal wards of the *Casetta*, and place a sentry near the hospital to disperse any "suitors". In 1830, more than 160 women were being examined each month. In 1834, syphilis accounted for a total of three deaths (0.11% of total deaths registered that year). In 1859, it was realised that this traditional periodic examination was not sanctioned legally, and prostitutes resisted further examinations and failed to present themselves. This resistance culminated in the enactment of Ordinance IV of 1861 that legally re-established the compulsory periodic
examination of prostitutes and detained in hospital those found to be infected until treatment was effective. In 1865, the prostitution population numbered 120. The legislative attempt to control the spread of venereal disease in Malta was looked upon favourably by the British Naval Authorities, who in 1867 published the Skey Parliamentary Committee Report recommending the necessity of registering and examining prostitutes, as was the practice in Malta, in all big ports. It also recommended increasing the facilities to accommodate infected women in Lock Hospitals.

A dedicated Lock Hospital was set up during the French interlude at the Anglo-Bavarian Auberge at Valletta, however this was closed down early during the early British Administration. After 1861, the provision of a Lock Hospital became necessary. This was set up as a detached pavilion of the Central Hospital at Floriana and consisted of two closely supervised wards accommodating thirty patients. These wards continued to function until they were transferred to the Poor House at Mhieret in 1910. The Poor House Lock Wards accommodating 10 beds continued to function until their closure in 1930, though a Venereal Disease Clinic was opened in March 1926.

A suggestion to repeal the 1861 Ordinance was forwarded in 1888 in line to its repeal in the United Kingdom in 1886. This was strongly opposed since it was considered that there was "no reason why this Island should be converted into a pest house for the propagation of the foulest and most insidious diseases which undermine the health and the life, not only of the immediate sufferers but of innocent generations yet unborn." The Ordinance was hence kept on the legal books and in fact was re-enacted with
minor amendments as the Venereal Disease Ordinance in 1920, subsequently confirmed by Ordinance VII of 1930 that made it also a criminal offence to knowingly transmit a venereal disease through sexual contact or to engage in any occupations likely to spread the disease. This Ordinance was repealed the subsequent year, but required its re-introduction during the Second World War. The Venereal Disease (Treatment) Regulations, promulgated in 1943, were re-enacted in 1948 as the Venereal Disease (Treatment) Act that enforced compulsory treatment for known infected persons.

After the promulgation of the 1920 Venereal Disease Ordinance which was designed to ensure stricter surveillance on clandestine prostitution, the number of patients committed to the Lock Hospital increased significantly from 83 cases in 1919-20 to 238 in 1920-21, 248 in 1921-22, and 258 in 1922-23. In the latter year, the cases treated included gonorrhoea (233 cases), chancroid (10 cases), syphilis (11 cases) and Bartolinitis (4 cases). Cases of gonorrhoea were discharged after three negative bacteriological examinations, while cases of syphilis were made to undergo a complete course of novarsenobillon besides mercurial and potassium iodide treatment. They were discharged when free from any symptoms of the disease. The number of cases of “insanity” attributed to syphilis admitted to the Lunatic Asylum during the year numbered three individuals.

The Venereal In-Patient section at the Central Hospital, Floriana consisted of a six-bedded ward for males and another six-bedded ward for females. A total of 17 males and 19 females were treated in this unit during 1937, with 13 cases being admitted for the treatment of syphilis, 22 cases for gonorrhoea
and one case for condylomata. The Venereal Out-Patients Clinic opened at the Central Hospital in 1926. During 1937 the Clinic dealt with a total of 159 male and 71 female patients. Attendance and treatment was offered free and the strictest secrecy was observed in order to encourage more frequent use of the Clinic. The cases seen included syphilis (111 cases), gonorrhoea (110 cases), chancroid (1 case), vulvovaginitis (1 case), condylomata (5 cases) and balanoposthitis (1 case) 31.

The use of potassium iodide in the treatment of syphilis was introduced in medicine during the 1840s when the chemical was found to be amazingly effective even on patients with later stage of the illness. Mercury had only been moderately effective on late stages of syphilis and was not effective on very deep lesions. The use of arsenic compounds like novarsenobillon in the treatment of syphilis was introduced in 1910. The treatment regiments during 1937 at the Venereal section of the Central Hospital were based on arsenic, bismuth and mercury compounds for syphilis, while gonorrhoea was managed by local therapeutic measures. Sulphonamides (Uleron and Dagenan) were soon to be identified as useful in both acute and chronic cases of gonorrhoea (1938-39) 32; while Penecillin became available for use in the Venereal Disease cases in 194533.
## Syphilis

- Arsenic compounds
  - Neosalvarsan
  - Tryparsamide
  - Trepasol
- Bismuth compounds
  - Bismuth metal
  - Bismuth hydroxide
  - Bismostab
  - Bismarsol
  - Iodo-Bismuthate of Quinine
- Mercury compounds
  - Mercuric bismiodide
  - Mercuric perchloride
  - Mercuric salicylate
  - Mercuric calomel
  - Inunctions of Ung. Hydragyri

## Gonorrhoea

- Autogenous Vaccine
  - stock or combined
- Irrigations
  - Using 1:8000-10000 Potassium Permanganate solution
- Electrolysis
  - In cases of strictures
- Ionization
  - In cases of persisting discharge
- Diathermy
  - In women for uterine or adnexial complications and cervical cautery in chronic endo-cervicitis
  - In man for epididymitis and prostatitis
- Antiseptics and balsamics
  - Santal wood oil - Salol - Methylene Blue capsules
  - Sulphonamides
- Urethroscopy
  - In chronic cases
- Urethral dilatation
- Massages

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**TREATMENT REGIMENS FOR VENEREAL DISEASE: 1937**
The Second World War promoted an increase in promiscuity among the population particularly at risk. The majority of cases were contracted from abroad. The next source of infection included prostitution, which in 1945 was noted to have increased. The barmaid was also considered to belong to a dangerous class, and as a source of infection emulated the 'street-girl'. There appeared to be in 1945 a fall in the number of cases transmitted by barmaids, a fall attributed to the withdrawal of the barmaid's licence once a report was lodged against her.

<table>
<thead>
<tr>
<th>Year</th>
<th>Syphilis</th>
<th>Gonorrhoea</th>
</tr>
</thead>
<tbody>
<tr>
<td>1937</td>
<td>33</td>
<td>81</td>
</tr>
<tr>
<td>1938</td>
<td>99</td>
<td>136</td>
</tr>
<tr>
<td>1939</td>
<td>63</td>
<td>100</td>
</tr>
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<td>1940</td>
<td>44</td>
<td>105</td>
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</tr>
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<td>1942</td>
<td>37</td>
<td>80</td>
</tr>
<tr>
<td>1943</td>
<td>87</td>
<td>58</td>
</tr>
<tr>
<td>1944</td>
<td>120</td>
<td>80</td>
</tr>
<tr>
<td>1945</td>
<td>72</td>
<td>66</td>
</tr>
</tbody>
</table>

Number of New Cases seen at the Venereal Clinic

The post-Second World War period brought about a drastic change of attitudes towards sexuality throughout Europe, a change that slowly but gradually permeated into Maltese society. Unlike the Victorian and post-Victorian era where sex was considered a disruptive force, sex in the 1960s started being looked at as good fun. Various reasons were responsible for these changes in sexual attitudes. Advancement of knowledge about the women's reproductive physiology helped women attain a positive attitude towards their sexuality giving them control over their sexual behaviour. In 1959 the first oral contraceptive pill was put on the market, thus bringing with it sexual freedom to
women. The fear of pregnancy with every sexual act in and out of marriage bed was removed, thus creating a sense of sexual freedom and uninhibited pleasure. The increasing promiscuity evidenced by the rising out-of-wedlock pregnancies has had correlates with increasing trends in venereal disease incidences, though there is unfortunately no legal requirement for the registration of various forms of venereal disease in Malta.

ENDNOTES

4 P. Parisi: *Aggiunta agli avvenimenti sopra la peste*. Palermo, 1603, p.59
6 NML: *AOM 1713*, f.8, 19; *AOM 6498 G*, n.p.; *Ms. 142*, vol.6, f.344. As reported by P. Cassar, 1965: *op. cit.*, p.232
7 NML: *AOM 1714*, f.147, 204; *AOM 1713*, f.8, 9. As reported by P. Cassar, 1965: *op. cit.*, p.232-233
9 S. Fiorini, 1988/89: *op. cit.*
11 M.A. Grima: *Della medicina traumatica altrimenti detta vulneraria*. Firenze, 1773, p.61
12 P. Cassar, 1965: *op. cit.*, p.232
Devotees of Venus. A History of Sexuality in Malta. DISCERN, 2003 [abridged]

16 “St Jerome and the Last Trumpet”: Three copies of this painting authenticated by Prof. John T. Spike are extant: a very good copy is found in a private collection; one good copy is found at the Chapter Hall of the Basilica of Senglea; and a very inferior copy previously belonging in St. Philip’s Church is now to be found at the Church Museum at Vittoriosa.
17 [C.E.] Robert, op. cit., p.32-37
18 P. Cassar, 1965: op. cit., p.63
20 B. Ransiujat: Assedio e blocco di Malta. Malta, 1843, p.119
21 P. Cassar, 1965: op. cit., p.228
23 P. Cassar, 1965: op. cit., p.229
25 P. Cassar, 1965: op. cit., p.233-234
26 Malta Government Gazette supplement, 7th July 1927, p.941
27 Public Opinion. 27th November 1888; P. Cassar, 1965: op. cit., p.230
28 Malta Government Gazette supplement, 21st May 1920, p.149; Malta Government Gazette supplement, 1st August 1930, p.977
29 Malta Government Gazette supplement, 29th July 1931, p.949; Malta Government Gazette, 31st August 1943, p.710
32 V.M. Curmi, 1938: op. cit.; V.M. Curmi: Report of the Medical officer in Charge of the Venereal and Dermatological Department, Central Hospital, for the year 1939. Annual Report on the Health Conditions of the Maltese Islands and on the work of the
Medical and health department for the year 1939. Government Printing Office, Malta, 1940, App. MC, p.lxiv-lxvi
33 V.M. Curmi: Report of the Medical officer in Charge of the Venereal and Dermatological Department, Central Hospital, for the year 1945. Annual Report on the Health Conditions of the Maltese Islands and on the work of the Medical and health department including the emergency medical services for the year 1945. Government Printing Office, Malta, 1948, App. MB, p.lxxiv-lxxv
34 V.M. Curmi, 1948: op. cit.
EARLY PREGNANCY CONDITIONS

Abortion as a medical complication of pregnancy rarely occupied the attention of medical practitioners. It however received indirect attention through the civil and ecclesiastical concerns regarding pregnancy termination. Termination of pregnancy was and remains illegal and immoral, and during the eighteenth century it was illegal not only to procure or counsel abortion, but also to cultivate abortive plants. A number of cases of procured abortion during this century are described.

In 1788 Bishop Labini in an edict against abortion gives an insight into the situations which were believed to predispose to abortion. Thus he considered that, they were guilty of abortion not only those who maliciously obtained it, but even cruel husbands who ill-treated their wives; and careless mothers who during pregnancy did heavy work, went for long walks, did not taste food, went dancing, and were indiscreet in their fasts. Parish priests were to urge their parishioners to give alms to poor pregnant women, since poverty often was the cause of abortion, either because women could not have the necessary food, or because they could not buy the required medicine. Dr. Butigiec in 1804 expressed similar views, quoting ancient authors such as Hippocrates and Avicenna. He thus advises the pregnant woman not to take a bath, not to wear tight clothes nor ride on a caleche or engage in undue exertions such as moving and lifting heavy objects. She was also advised to avoid rough roads and shun
strong purgatives such as hellebore, scammony and colocynth. He further believed that irritability of the nervous system is communicated to the uterus producing convulsions in this organ and sometimes abortion³.

In the second part of the nineteenth century, the views pertaining to aetiology of abortion were similar. During the period 1858-72 Dr. Gaetano Laferla collected a series of 98 abortion and preterm deliveries, 17 of which occurred in the first two months of pregnancy, 63 in the second to fourth month, and 18 in the fifth to seventh month. A large proportion of these abortions were recurrent with 4 being the second, 8 the third and 5 the fourth. They occurred in women aged 18-30 years of age, during the period of wisdom tooth eruption. The recorded causes for the abortions included hysteria - 41, strong moral impressions - 7, syphilis - 4, obesity - 4, fatty degeneration of the placenta - 5, cloranaemia - 2, spinal irritation - 1, plethora - 2, placenta praevia - 4, typhoid fever - 6, tuberculosis - 1, cholera - 2, smallpox - 1, blows to the abdomen - 5, and excessive burden - 3. In addition pharmacologically induced accidental abortions may also have been caused by inadvertent administration of drugs by the pharmacist. Hysteria was apparently considered a strong predisposing cause. Dr Laferla strongly believed in the use of the resinous gum asa foetida to prevent abortions or preterm deliveries⁴.

Prof. Pisani in 1883 similarly believed that abortion was caused by undue mental excitement; trauma to the abdomen; undue physical exertions such as jumping, long walks, or carriage drives; uterine disease; and maternal illness. For this reason he mentions that pregnant women could be exempted from attending court, and that in previous years a criminal who held on to a pregnant
woman was not arrested. He refers to a case of a pregnant woman who was not hanged because of her pregnancy. He emphasises the need for conditional baptism in cases of miscarriages. Prof. Schembri in 1896 considered that causes predisposing to abortion could be maternal or fetal. The most common amongst the maternal causes were a severe shock sustained by a fall, a long railway journey or carriage drive, riding or any other hard bodily exertion, a chill, an indigestion from excess of eating and drinking, abuse of wine, fevers, cholera, nervous shocks, convulsions, irritability of the womb, general debility, consumption, heart or kidney disease, uterine disease, and the use of strong aperients or drugs such as ergot, quinine and others. He advises his student midwives to call a doctor when a patient's miscarriage occurs. In the meantime the midwives were advised to plug the vagina. The plug made from medicated cotton wool, besides the advantage of checking the haemorrhage, had also that of rousing uterine contractions by pressure on the cervix thus favouring expulsion of the pregnancy products. The plug was kept in from 24 to 30 hours, after which the vagina was to be washed and disinfected.

In 1938 cases of incomplete abortion were treated by hot vaginal irrigations and pituitrine injections and if this proved unsuccessful, by cleaning the womb and injecting sterilised glycerine with acriflavin into the uterine cavity. One case proved fatal with this therapy.

Molar pregnancy was referred to by Dr. Butigiec in 1804 quoting Aristotle in his belief that moles were caused by absence of heat and the opposite view of Avicenna who believed the cause to be excessive heat. He also referred to Paolo Zacchia who believed that a mole was the result of conception and therefore its
presence in an unmarried woman was a sign of violated chastity. The condition was also mentioned by Profs. Pisani and Schembri. These authors identified two forms of mole - the fleshy and the hydatid moles. They comment that at the time of delivery, the condition particularly required the attention of a medical man since all the molar tissue had to be removed and the cavity thoroughly disinfected to prevent septicaemia. In 1937 at the Central Hospital in Malta there were out of 162 abortions, 16 carneous moles and one hydatiform mole.

**Extra-uterine gestations** were first described at post-mortem in 1730 by William Giffard, but it was only in 1883 that Robert Lawson Tait attempted surgery to manage a ruptured ectopic pregnancy. In the Maltese Islands Dr. Butigieic in 1804 mentioned extra-uterine pregnancy, presumably at term, as an indication for Caesarean section. A detailed case of extra-uterine gestation which developed into a full term intra-abdominal pregnancy is described by Prof Arpa in 1843. The management of this case appears to have been conservative with the use of leeches in early pregnancy. The case involved a twin pregnancy - one intra-uterine and one intra-abdominal. The former delivered normally at term, the latter was expelled per rectum after a very severe puerperal infection and degeneration of the fetus. The mother survived to become pregnant later. In his discussion of the possible differential diagnosis of the case described Arpa also gives a detailed description of the condition. Subsequent mention of extra-uterine gestations was made by Profs. Pisani and Schembri in 1883 and 1896 who described the ovarian, tubal and abdominal pregnancies. Prof. Schembri further mentions that the condition was fatal to the woman and generally causes death from bursting of the ovum at or about the fourth month. When detected in time it necessitated abdominal operation to
remove the tube or ovary with its contents. Prof. Schembri is known to have embarked on abdominal operation for the first time in Malta in 1890 with the performance of an oophorectomy for cystic adenoma. Prof. J. Ellul presented two papers to the Camera Medica dealing with ectopic pregnancy. The first read in 1923 was entitled "Gravidanza ectopica bilaterale contemporanea". This described the clinical course of an ectopic pregnancy in a 35 year old woman admitted in the Civil Hospital. The case was managed initially by a posterior cul de sac colpotomy which confirmed the diagnosis. She was subsequently operated and a subtotal hysterectomy was performed. The second paper, read after 1930, was entitled "Note clinice su Parto addominale o gravidanza ectopica primaria a termine?". In 1937 there were at the Civil Hospital in Malta ten cases of ectopic gestations, of which three were very severe with intraperitoneal flooding and marked collapse and anaemia. These were operated on. One case was interstitial and required hysterectomy. The non-operated cases included two intraligamentous ectopics with rather marked haematomata, three tubal abortions with a small pelvic haematocoele, and one interstitial pregnancy that finally became intrauterine. The latter cases were treated medically and kept under continuous observation. All cases recovered.

**Phantom pregnancies** occupied the attention of most authors. Dr. Butigiecc quotes Francois Mauriceau of Paris and Richard Manningham of London in the course of a discussion on the causation of false pregnancy stating that false pregnancy is produced by accumulation of air and water in the abdomen. Profs. Pisani and Schembri both refer to the condition of false or phantom pregnancy. Prof. Schembri remarks that phantom pregnancy was observed in extremely hysterical women, especially in the married who have a craving for
child bearing without ever having conceived. Such symptoms were noted to wither away with a whiff of chloroform.  

ENDNOTES

2 AAM: Edicta Labini ms., vol.12
5 Pisani S: Kitb il Qabla, P Debono & Co, Malta, 1883, p.21-22,40-41,102-103
13 Pisani SL, 1883: op. cit., p.28; Schembri GB, 1896: op. cit., p.44
14 Vella V: Lapartomia in Malta, Rivista di Ostetricia e Ginecologia, 1891, +3p. (reprint)
17 Pisani SL, 1883: op. cit., p.66-67; Schembri GB, 1896: op. cit., p.44-45
HORMONE REPLACEMENT THERAPY IN THE MENOPAUSE

The problems associated with the menopause, in the Maltese Islands, have come to the fore in the last decade with a greater awareness of the therapy that is available to reduce and manage the changes that occur with increasing age. It has now been conclusively shown that many of the symptoms of the menopause are due to a fall in the body's production of the hormone oestrogen. This deficiency state gives rise to a number of short-term symptoms such as hot flushes and night sweats, psychological symptoms including depression, and atrophy of the genital organs and the body skin. Long-term effects of the menopause include osteoporosis predisposing to bone fractures, and cardiovascular disease leading to heart attacks and stroke. All these changes, even the medically minor ones, are important to the ageing woman since they do influence to a varying extent the quality of life. The long-term effects are significant in that they can be an important cause of early deaths. These changes can be reduced by the use of hormone replacement therapy, though in no way can this form of treatment be considered the long-searched for potion for immortality and eternal youth.

While the proportion of women reaching the menopause has steadily increased in the last century, the problems and effects have been experienced
since ancient times. Thus the proportion of Maltese women aged 65 years and over has increased from 5.3% in 1901 to 10.9% in 1985. The increase has been greater in the sister island of Gozo (Figure 1). A number of women thus did reach menopausal age, but because of the absence of any available therapy had to put up with the symptoms. Thus even in Malta, osteoporosis is not a modern disease. The earliest evidence of osteoporosis in Malta comes from the skeletal remains dated to the late medieval period. In 1969 a collection of bones was found in a secret passage within St. Gregory's Church at Zejtun which had been rebuilt in 1492. These bones showed a number of paleopathological features. Three specimens - a femur, tibia and pelvis - showed gross and radiological features consistent with osteoporosis. These specimens were attributed to an elderly female who
probably suffered from the senile form of the disease (Type II osteoporosis). Osteoporotic bones are not a frequent feature in palaeopathology since their inherently fragile nature predisposes to their accelerated destruction. Furthermore a fewer proportion of individuals reached an age where osteoporosis became evident.

Osteoporosis is a skeletal condition characterised by a decrease in bone mass. This decrease results in increasingly porous and more easily fractured bones. Though the whole of the skeleton is affected by the progressive disorder, the effects of osteoporosis in the form of fractures become more evident in the wrist, spine, and hip. The osteoporotic process accelerates with the female gonadal deficiency that occurs after the menopause. The most common form of the disease, Primary Osteoporosis, includes postmenopausal or oestrogen-deficient osteoporosis (Type I) observed in women whose ovaries have ceased to produce the hormone oestrogen; age-related osteoporosis (Type II) affecting those over the age of 70; and idiopathic osteoporosis of unknown cause that affects premenopausal women and middle-aged men. Secondary osteoporosis may be caused by bone disuse as a result of paralysis or prolonged immobilisation; endocrine and nutritional disorders; specific disease processes; and certain drug therapies. The present emphasis in management is aimed at reducing the progression of Type I Primary osteoporosis. Prevention and treatment of this form of osteoporosis include oestrogen and/or progestin therapy of peri- and postmenopausal women, increasing the intake of calcium and other nutrients, promoting weight-bearing exercise, and the use of new drugs such as calcitonin.
No further mention of menopausal related disorders appears in the historical medical records until well after the isolation of oestrogen. One of the first experimental demonstrations of the existence of ovarian hormones was given by the Austrian gynaecologist Emil Knauer in 1896 who showed that female sexual characteristics developed in castrated animals when the ovaries were transplanted. Also during the later years of the 19th century, it was demonstrated that loss of ovarian function was responsible for the distressing symptoms of the menopause. The first attempts to replace lost ovarian function were made by the grafting treatment of ovaries. Subsequently dried ovarian tissue was administered orally. The starting point of much of the modern work on sex hormones can be regarded to be the work of Stockard and Papanicolaou in 1917 who demonstrated that the vaginal cells undergo characteristic changes throughout the menstrual cycle. Their work was the precursor of the cervical screening for cancer using the "Pap" smear. In 1923 Allen and Doisy demonstrated that injections of ovarian follicular fluid extracts caused specific changes in vaginal cells. Oestrone and oestriol were isolated from urine in 1929 and marketed by Schering in 1934. Effective oral therapy started with stilboestrol, and later the first orally-active steroid ethinyloestradiol.

The advances in the international medical field were apparently closely monitored by local practitioners. The hormonal role of the ovaries to prevent menopausal symptoms was already recognised in Malta by 1937. In his clinical departmental reports for 1937 and 1938, Prof. Joseph Ellul mentions that after radical surgery requiring the removal of both ovaries in young women, auto-innexitation of the ovary in the vulva was performed. One case
was performed in 1937 after hysterectomy and bilateral oophorectomy performed as treatment for uterine fibroids. In women with signs of ovarian insufficiency were managed by injection of hormone preparations in the form of Aestroform B. Two cases were managed in this way in 1938, one following a premature surgical menopause.

The detailed departmental annual reports were curtailed as a result of the onset of the Second World War. Thus no information can be gleaned about the attitudes of local practitioners towards menopausal symptoms during this period and subsequent years. By 1947 at least, auto-innestation of the ovary seems to have fallen in disrepute since the list of surgical procedures performed in the gynaecology department during that year and subsequently fails to include this operation. October 1948 saw the publication of the first issue of the student medical journal CHESTPIECE. In that issue an advertisement for Fertilinets, imported by agents C. Bonnici-Mallia of Valletta, was included. This medication consisted of activated standardized hormone preparations for the efficacious combating of premature symptoms of advancing age, nervous debility, etc.

The socio-economic and demographical changes which occurred in the post-war period resulted in a gradual shifting of emphasis on medical problems. Initial mention of disease caused by nutritional deficiency, including comments on calcium deficiency though not to osteoporosis, was made in 1952. Here mention was made about the relative infrequency of calcium deficiency syndromes possibly because the high calcium content of the local water supplements a considerable degree any possible calcium deficiencies.
of the foodstuffs. The 1950s also saw the introduction to the Maltese market of other medications aimed at controlling menopausal symptoms. The CHESTPIECE advertised Climatone tablets (1954) which were described as useful to provide effective sedative-free control of menopausal disorders without side-effects [Paines & Byrne Ltd, U.K.; local agents Ches de Giorgio, Valletta] and Multigland (1956) indicated in menorrhagia, hysteria, neuroasthenia, and menopausal disturbances [Armour Labs, U.K.; local agents Fabri & Tonna, Valletta] 6.

Oestrogen replacement therapy remained controversial. It became fashionable in the 1960s, but when complications of therapy became apparent in the 1970s, the initial enthusiasm was dampened. Physicians became reluctant to treat menopausal symptoms while patients became wary of hormone therapy because of the widely publicised reports that oestrogens caused endometrial cancer. These attitudes were partly reflected in Malta. Oestrogen therapy was apparently in use during the 1960s, though the extent of the use could not be estimated. In a study of postmenopausal bleeding, one case from a total of 63 patients was found to be due to oestrogen administration. It was further advised that the routine or prolonged administration of oestrogens in postmenopausal women is most undesirable. In the 1980s, with a better understanding of therapeutic regimens, hormone therapy once again gained in popularity. We have now apparently gone to the other extreme where medical practitioners may be prescribing these hormone preparations indiscriminately 7.
The overall clinical impression in the 1970s and 1980s was that, unlike the European counterpart, Maltese women as a population group suffered less from the effects of the menopause and osteoporosis. This was attributed to the high calcium content in water and the general tendency towards obesity. Peripheral fat stores are known to be another endogenous source of oestrogens. This latter observation also explained the higher incidence of oestrogen dependant cancers in women - namely the breast and uterus, which have been shown to have an association with obesity and fat intake 8.

A population study performed in 1981 showed that there was a gradual decrease in the overall height of the female population with increasing age. Thus the mean height in women decreased from about 153 cm in women aged 45-54 years to 147.6 cm in those aged more than 75 years 9. The marked decrease in women mean heights, especially when compared to the minimal decrease in the male mean heights confirms that postmenopausal osteoporosis does occur in the local female population (Figure 2).

**Figure 2: Mean Heights by Age and Sex**
The extent of osteoporosis may however not be a very marked one, and may not result in an increase in clinical fractures. A retrospective study (1987-89) has confirmed the overall clinical impression that while osteoporotic fractures were commoner in females when compared to males, the incidence of osteoporotic hip fractures in Malta was similar to that seen in other Mediterranean countries being about a third the incidence in Northern European countries (Figure 3). The relative natural protection from osteoporosis was attributed to genetic factors, climatic conditions and dietary habits.10

![Figure 3: Incidence fracture femur head >50 years age](image)

It appears that in previous years, the deficiency state of the menopause was understood by many to be "natural", and many women accepted the fact that
they would have to put up with the menopausal symptoms stoically in the
same way as previous generations did. Nowadays, a choice of therapy is
available and many women are requesting preventive treatment to transform
their lives for the better.

ENDNOTES

1 R. Camilleri: *A demographic and socio-economic profile of ageing in Malta*. CICRED/INIA: Malta, 1993
5 *Annual Reports on the Health Conditions of the Maltese Islands and on the work of the Medical and Health Department including the Emergency Medical Services for the years 1940-1947*. Government Printing Office: Malta, 1941-1949, 8 vols.; Chestpiece, October 1948, vol.1 no.1
7 E.S. Grech: Postmenopausal bleeding. *Chestpiece*, 1965, 1(17):31-34