

History of Gynaecology in Malta

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**HISTORY OF
GYNAECOLOGY
IN MALTA**

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Maltese Gynaecology

Introduction

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 specialty 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 specialty 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 1847.¹

The nineteenth century had an auspicious beginning for the specialty when Ephraim McDowell in 1809 performed successfully the first ovariectomy 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 ovariectomy in 1857 and by 1880 was performing his thousandth one.² During his stay in Malta, Spencer Wells was one of a group of three British physician surgeons who helped introduced ether anaesthesia on the islands.³ In Malta the first ovariectomy was performed under chloroform anaesthesia by Prof. Giuseppe Batta Schembri in November 1890.⁴ The success in ovariectomy, combined with the concurrent introduction of asepsis and anaesthesia, sparked off an enthusiasm for further advances in gynaecological surgery.

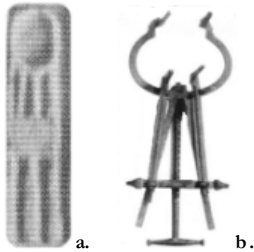
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1. J.M.N. Kerr, R.W. Johnstone and M.H. Phillips: *Historical review of British Obstetrics and Gynaecology 1800-1950*. Livingstone, Edinburgh, 1954, p.358
 2. J.M.N. Kerr et al: *ibid*, p.359
 3. Savona-Ventura C. The naval career of Sir Thomas Spencer Wells in the Mediterranean: 1842-1853. *Maltese Medical Journal*, 1999, 10(2):41-46
 4. V. Vella: Laparotomia in Malta. *Rivista di Ostetricia e Ginecologia*. (reprint), 1891, +3p.

Reproductive anatomy

The Temple Period man in Malta, with his Fertility cult during the 4th-3rd millennium BC, 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.⁵ The first direct 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.⁶ 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.⁷



Temple Period statuette
Tarxien temple



Classical Vaginal speculum

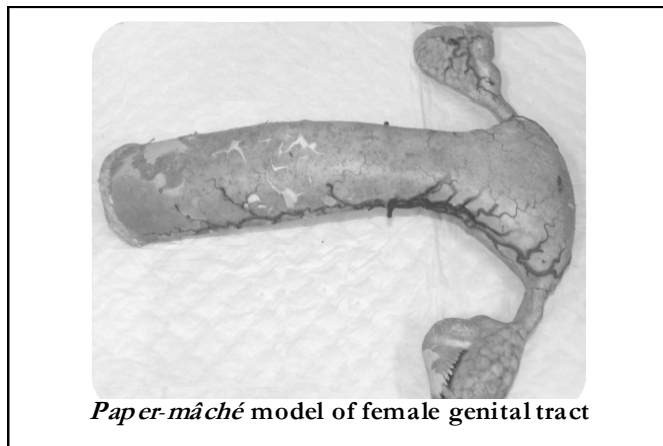
- a. Depiction on tombstone, Rabat-Malta
b. specimen from Pompeii-Italy

Medical practitioners were apparently conversant with the prevalent knowledge relating to gynaecology and reproductive function. Giuseppe Callus and Rayneri de Bonellis in the mid-sixteenth century appeared to be well acquainted with medieval thought quoting in their medico-legal report the views of Galen (131-200 AD), Rhazes (860-932 AD), Avenzoar (1072-1162 AD) and Avicenna (980-1037 AD).⁸

5. T. Zammit and C. Singer: Neolithic representations of the human form from the islands of Malta and Gozo. *J Royal Anthropol Instit*, 1924, p.92-97
6. P. Cassar: Surgical instruments on a slab in Roman Malta. *Medical History*, 1974, 18:p.89-93
7. T. Cianfrani: *A short history of obstetrics and gynecology*. C.C. Thomas, USA, 1960, p.331
8. P. Cassar: A medico-legal report of the sixteenth century from Malta. *Medical History*, 1974a, 18:p.354-359

In 1740 Dr. 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 Montpellier in 1749.⁹ In 1843 Prof. Saverio Arpa reviewed the clinical features of uterine fibroids and ovarian tumours particularly when these complicated pregnancy.¹⁰

In his lectures to medical students, Dr. Francesco Butigieg 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.¹¹ In 1860, the Department of Anatomy acquired *paper-mâché* models of different stages of the development of the human ovum, of the generative organs and of the abnormal forms of the pelvis.¹²



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9. G. Locano: *Dissertatio physiologica de mechanico feminarum tributo*. Montpellier, 1749; P. Cassar: *French influence on medical developments in Malta*. Ministry of Education, Malta, 1987, p.8
10. S. Arpa: *Di un caso particolare di gravidanza extra-uterina*. G Camilleri & Co, Malta, 1843, +41p.
11. S. Bardon: *Trattato dell'arte ostetrica dettato e spiegato del Perille Signor Dr Francesco Butigieg nello studio pubblico del Grand Ospedale Nazionale de'Maltesi*. Principiato li 18 Ottobre 1804, manuscript, +250fols.
12. C. Savona-Ventura: *Contemporary Medicine in Malta [1798-1979]*. P.E.G. Ltd., Malta, 2005, p.312-318.

Examinations set to medical students in anatomy during the late 19th century included questions that assessed the students' knowledge of gynaecological anatomy, histology and physiology. During 1879-80, thesis titles allotted to students during examination included "description of the uterine tubes" and "ovulation – enumeration of the principal phenomena and description of follicular regression in particular". During the examinations conducted in June 1884 included a section on obstetrical anatomy and physiology that also assumed knowledge of gynaecological anatomy and physiology.¹³ In their published lecture-notes to midwives, Profs. Salvatore Luigi Pisani in 1883 and Giuseppe Batta Schembri in 1896-97 both included sections describing the anatomy of the pelvis and pelvic organs, besides an account of the physiology of menstruation.¹⁴

Infertility and intersex

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. Giuseppe Callus and Rayneri de Bonellis examined the male partner of the marriage and confirmed that consummation was impossible owing to his genital malformation described as severe hypospadias.¹⁵ 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.¹⁶ 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.¹⁷

13. J.L. Pace: *The history of the school of anatomy in Malta*. University Press, Malta, 1974, Table 4, fig.28c.

14. S.L. Pisani: *Ktieb il Qabla*, P Debono & Co, Malta, 1883, p.5-18,A-E; G.B. Schembri: *The Midwife's Guide book*. Government Printing Office, Malta, 1896, p.1-20; G.B. Schembri: *Tagħlim għal ištudenti ta l-iskola tal kwiebel ta l-Isptar Centrali*. Government Printing Office, Malta, 1897, p.1-28

15. P. Cassar, 1974a: *op. cit.*

16. P. Cassar: Change of sex sanctioned by a Maltese law court in the eighteenth century. *British Medical Journal*, 1954, 2:p.1413

17. Archiepiscopal Archives Melitensis - *Super Divortio Inter Alicunda Vella e Alessio Vella*, unclassified documents. Reported in: F. Ciappara: *Marriage in Malta in the late eighteenth century*. Assoc News Ltd, Malta, 1988, p.69

Fertility was an important aspect of life in bygone days. A 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 (Pilulae 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 *Calamus aromaticus*.¹⁸

While infertility had significant social consequences, very little could be done to help infertile couples until the elements of reproductive physiology were well understood. Attempts to effectively investigate and manage cases of infertility were only initiated in Malta in the 1970s under the direction of Prof. Arthur P. Camilleri.¹⁹ The introduction of effective gonadotrophins in clinical practice in the early 1980s and the eventual introduction of in vitro fertilization in the 1990s opened a new vista in the management of these unfortunate couples, though it created problems as a result of the consequences of hyperstimulation including an increase in multiple pregnancy rates.²⁰

Early pregnancy problems

The church authorities thus continuously encouraged its faithful to procreate and increase the number of souls that potentially would fill out the heavens. The other concern was related to the ethical issue related to pregnancy termination. The process of a natural miscarriage 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 the issue of attempts at 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 the 18th century are described.²¹

18. P. Cassar: Inventory of a sixteenth century pharmacy in Malta. *St Luke's Hospital Gazette*, 1976, 11(1):p.26-34

19. A.P. Camilleri: Prospects for the childless. *St Lukes Hosp Gaz*; 1976; 11(2):76-79; A.P. Camilleri, T. Micallef, J. Ellul, and J. Said. Homograft transplantation of the ovary. *Transplantation*. 1976; 22(3):308-311; A.P. Camilleri: A realistic approach to infertility. *Practitioner*. 1980; 224 (1346):835-837.

20. C. Savona-Ventura, A. Vella, and K. Zammit: Temporal trends in multiple pregnancy trends in the Maltese Islands. *International Journal of Risk & Safety in Medicine*, 2006, 18(3):173-179

A 1592 inventory of a Maltese medieval pharmacy list a number of preparations useful to promote the onset of menses possibly referring to abortifacient agents.²² Folklore also attributes abortifacient properties to the seeds of the Verbain (*Verbena officinalis* L., Maltese: Buqixrem). While this plant has been attributed with several medicinal uses, it is not generally listed as an abortifacient. Another plant of the same family - the Chaste tree (*Vitex agnus-castus* L., Maltese – Sığra tal-Virgi) - was supposed to have properties of decreasing sexual desires.²³



Bishop V. Labini

In 1788 Bishop Vincenzo Labini in an edict against termination of pregnancy gives an insight into the situations which were believed to predispose to miscarriages. 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 miscarriage, either because women could not have the necessary food, or because they could not buy the required medicine.²⁴

Dr. Francesco Butigieg 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 miscarriage.²⁵

In the second part of the nineteenth century, the views pertaining to aetiology of miscarriage were similar. During the period 1858-72, Dr. Gaetano LaFerla collected a series of 98 miscarriages 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

21. C. Savona-Ventura: The influence of the Roman Catholic Church on Midwifery practice in Malta. *Medical History*, 1995, 39:18-34

22. P. Cassar, 1976: *op. cit.*

23. G. Lanfranco: *Hxejjex medicinali u obrajn fil-Gxejjer Maltin*. Media Center, Malta, 1993; T. Zarb: *Folklore of an Island*. PEG Publ., Malta, 1998, p.37

24. AAM: *Edicta Labini ms.*, vol.12

25. S. Bardou, 1804: *op. cit.*

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 miscarriages 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 miscarriages or preterm deliveries.²⁶



Prof. S. Arpa

Prof. S.L. Pisani in 1883 similarly believed that miscarriage 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 reminds 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 she was pregnant. He further emphasises the need for conditional baptism in cases of miscarriages.²⁷ Prof. G.B.



Prof. S.L. Pisani

Schembri in 1896 considered that causes predisposing to miscarriages could be maternal or foetal. 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 patients miscarriages. In the meantime the midwives were advised to plug the vagina. The plug made from medicated cotton wool, besides the advantage of check-



Prof. G.B. Schembri

26. G. Gulia: Considerazioni cliniche sullo aborto. *Il Barth*, 10 June 1872, I(8):p.149-152; 6 August 1872, I(9):p.170-171; 9 October 1872, II(10):p.193-194; G. LaFerla: *Sull' uso della gomma-resina d'asa foetida adoperata per prevenire la morte del feto nelle gravidanze morbose cagionate da inerzia dell' utero*, S.G. Vassalli, Malta, 1855, +29p.

27. S. Pisani, 1883: *op. cit.*, p.21-22,40-41,102-103

ing 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.²⁸ 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.²⁹

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.³⁰ 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.³¹ In 1937 at the Central Hospital in Malta there were out of 162 abortions, 16 carneous moles and one hydatiform mole.³²

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. Butigiec in 1804 mentioned extra-uterine pregnancy, presumably at term, as an indication for Caesarean section.³³ A detailed case of extra-uterine gestation which developed into a full term intra-abdominal pregnancy is described by Prof Saverio 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 foetus. 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.³⁴ Subsequent mention of extra-uterine gestations was

28. G.B. Schembri, 1896: *op. cit.*, p.98-100, 105

29. *Annual report on the health of the Maltese Islands for the years 1936-1940*, Government Printing Office, Malta, 1936-1942, 5 vols .

30. S. Bardon, 1804: *op. cit.*

31. S.L. Pisani, 1883: *op. cit.*, p.103-104; G.B. Schembri, 1896: *op. cit.*, p.53-55

32. *Annual report ... 1936-40: op. cit.*, 1938;p.119-126

33. S. Bardon, 1804: *op. cit.*

34. S. Arpa: *Di un caso particolare di gravidanza extra-uterina*. G. Camilleri & Co.: Malta, 1843, +41p.

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.³⁵



Prof. G. Ellul

Prof. Guze 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?*".³⁶ In 1937 at the Civil Hospital in Malta, there were 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 haematocele, and one interstitial pregnancy that finally became intrauterine. The latter cases were treated medically and kept under continuous observation. All cases recovered.³⁷

Phantom pregnancies occupied the attention of most authors. Dr. Butigieg 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.³⁸ 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.³⁹

35. S.L. Pisani, 1883: *op. cit.*, p.28; G.B. Schembri, 1896: *op. cit.*, p.44

36. J. Ellul: *Application of Joseph Ellul B.Sc. M.D. Junior accoucher and Gynaecologist - Central Civil Hospital. Malta, 1930*; J. Ellul: *Gravidanza ectopica bilaterale contemporanea. Rivista Medica, June 1923, 1 (4):p.84-87*

37. *Annual report.....1936-40: op. cit.*

38. S. Bardou, 1804: *op. cit.*

39. S.L. Pisani, 1883: *op. cit.*, p.66-67; G.B. Schembri, 1896: *op. cit.*, p.44-45

Birth control and contraception

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 three to four 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.

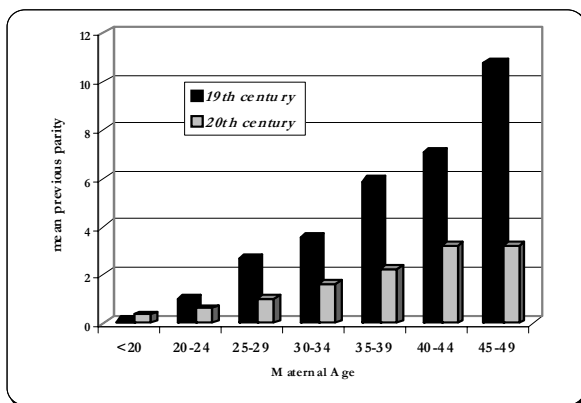
There is little information about the methods of birth control used by the Maltese population prior to the mid-twentieth century. Abnormal intercourse of various forms was probably practised. An Augustinian friar in the late eighteenth century made it a point to ask his penitents whether their husbands had had abnormal intercourse with them.⁴⁰ Abnormal intercourse was also condemned during the late nineteenth century by the Prof. G.B. Schembri who 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.*⁴¹ 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.

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, 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.⁴²

40. Archivum Inquisitionis Melitensis [AIM]: *Processi 131A*, fols. 155r-207r

41. G.B. Schembri, 1896: *op. cit.*, p.104-105

42. C. Savona-Ventura: A maternity unit in Gozo a hundred years ago. *Maltese Medical Journal*, 1995, 7(1):p.55-61.



**Mean previous parity by maternal age
Maltese Islands: late 19th and 20th 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. Sex was for procreation not recreation! 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 au-

thorities in Malta contributed towards the fall in fertility rates notable during this period in Malta. The Roman Catholic Church however maintained on ethical grounds its opposition to all other so-called “unnatural methods of contraception”.

On the scientific scene major breakthroughs were being made in the development of hormonal contraception with the combined oral contraceptive pill being introduced to the market in the late 1950s. This medication reached the Maltese market by the late 1960s though its use as a contraceptive remained controversial. During the first meeting of the European Congress of Catholic Doctors held in Malta in 1966, 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."⁴³ Other Maltese doctors participating in the Congress expressed similar views, particularly the use of the progestational agents to prolong the infertile period.⁴⁴ The first oral contraceptive to be advertised in the Maltese medical literature in 1967 was primarily marketed for menstrual cycle control.⁴⁵

The general Maltese population of the 1960s and 1970s retained its conservative attitude towards contraceptive practices. A survey carried out in 1971 among 321 reproductive age women showed that 87% of these women were using some form of active family control. About one-fourth of those practising contraception used the rhythm method alone, the remainder using methods not approved by the Church, with *coitus interruptus* being the most commonly used. Barrier methods, mainly the male condom, were the method of choice in 12% of the respondents. The oral contraceptive was used by only 2% of women.⁴⁶

The trend slowly changed in the following decades after the introduction of state-managed family planning clinics in 1982. In these clinics all methods of

43. L.J. German: Medical problems of Catholic Family planning. In: A. Gerada, A. Galea, and F.F. Fenech (editors): *The Catholic Doctor and his apostolate within the family. Proceedings of the First European Congress of Catholic Doctors*. MAM, Malta, 1966, p.169-170

44. E.A. Agius: Medical Problems of Catholic Family Planning. In: A. Gerada et al, 1966: *ibid*, p.172-173; L. Spiteri: The Use of the Pill. In: A. Gerada et al, 1966: *ibid*, p.174-175

45. *St. Luke's Hospital Gazette*, 1967, 2(1); *St. Luke's Hospital Gazette*, 1968, 3(1)

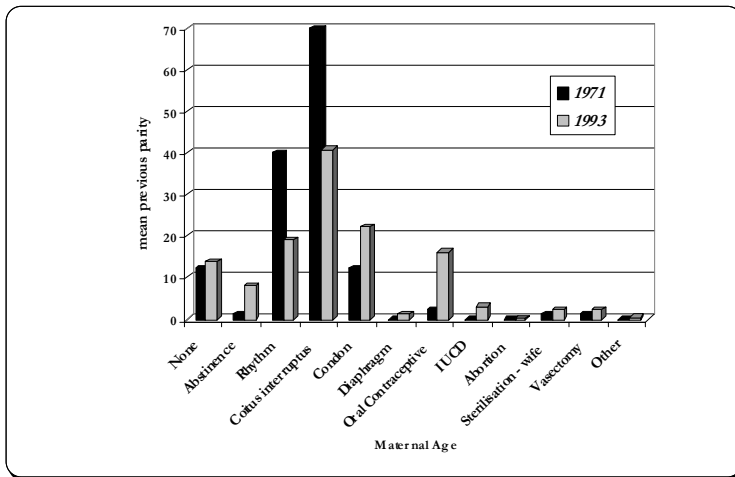
46. R.G. Milne: Family Planning in Malta. *Population studies*, 1973, 27(2):p.373-386.

47. R.G. Milne and R.E. Wright: Changing pattern of contraceptive use in Malta. *Economic & Social Studies*, 1993-94, 7:p.1-7

48. J.L. Pace and S. Ramaswamy: Skeletal Remains. *Excavations at Hal Millieri, Malta: a report of the 1977 campaign conducted on behalf of the National Museum of Malta and the University of Malta*. eds.

T.F.C. Blagg, A. Bonanno, and A.T. Luttrell. University Press, Malta, 1990, p.84-95.

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. These significantly helped change the pattern of contraceptive use in the 1990s. 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.⁴⁷

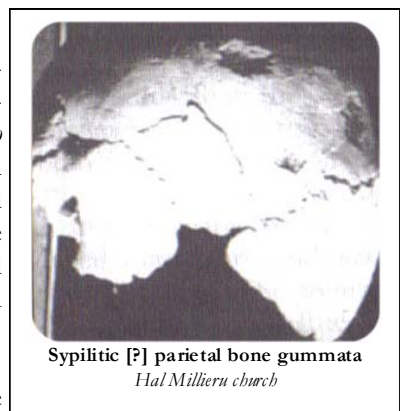


Contraceptive Use by Method in Malta: 1971 & 1993

Venereal disease

There is scant information about gynaecological conditions in Malta prior to the twentieth century. Venereal disease or *morbo gallico* however has long been a recognised problem on the Islands. 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.⁴⁸

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 Christopher 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.



Dr. M.A. Grima

In addition to the skeletal archaeological evidence, the *Santo Spirito* Accounts Register 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.⁴⁹ The prescribed treatment consisted of *unguenta vulneraria* like *Aegypticaico* 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.⁵⁰

The advent of the Knights of St John in 1530 and the establishment of the Islands as a maritime base brought prostitution to the Islands creating an ideal environment for the spread of venereal disease. 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

50. S. Fiorini: A prescription list of 1546. *Maltese Medical Journal*, 1988/89, 1(1):p.19,

and that the enlargement of the inguinal glands could be one of its signs. At its initial outbreak, the buboes appearing during the 1592 plague epidemic were thought to be caused by venereal disease.⁵¹ 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 *Casetta delle Donne* in Valletta, known as the *falanga*, was set up for female patients.⁵² 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 inunctions 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. It continued to function until 1798.⁵³

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 inunctions. 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.⁵⁴ 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 because of her developing hand deformities "*she no longer remained capable of administering the mercurial inunctions, so much so that her patients were never com-*



Hand contractures caused by mercury poisoning

51. P. Parisi: *Aggiunta agli avvenimenti sopra la peste*. Palermo, 1603, p.59

52. NML: AOM 99, f.69; Ms. *Treasury B*, 307D, f.243. Reported by P. Cassar: *The Medical History of Malta*. Wellcome Historical Library, London, 1964, p.225, 232

53. NML: AOM 1713, f.8, 19; AOM 6498G, n.p.; Ms. 142, vol.6, f.344. Reported by P. Cassar, 1964: *ibid*, p.232

54. NML: AOM 1714, f.147, 204; AOM 1713, f.8, 9. Reported by P. Cassar, 1964: *ibid*, p.232-233

pletely cured and they had to return to hospital for further treatment after a short time".⁵⁵

The treatment for the *morbo gallico* concentrated primarily towards the primary lesion with the application of various *unguenta vulneraria* and *digestive*.⁵⁶ 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 diseases 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 Dr. Fortunato Antonio Creni published his thesis *Tractatus physico-medicus de Americana Lue, ac omnium Tutissima curandi Metodo Mercurii Sublimati corrosivi ope* [Malta, 1762]. This publication was apparently criticised by an unidentified *melitensem doctorem*, a criticism that elicited a response by Dr. Creni who published *Responsio ad epistolam in Tractatu physico-medico* [Catania, 1764]. Dr. Creni further mentions the use of Keiser's pills, of unstated composition, that were being administered to patients suffering from syphilis.⁵⁷ Dr. Creni 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.⁵⁸ Anti-venereal treatment was considered harmful if administered during the summer months, a belief that required the closure of the *Falanga* during this period.⁵⁹ Regular mercurial applications in the management of syphilis were 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

55. NML: AOM 1194, f.202; AOM 1195, f.93-100. Reported by P. Cassar: Female employees in the Medical Services of the Order of St. John in Malta. *Melita Historica*, 1978, 7(3):p.225-233.

56. S. Fiorini, 1988/89: *op. cit.*

57. A. Creni: *Tractatus physico-medicus de Americana Lue, ac omnium Tutissima curandi Metodo Mercurii Sublimati corrosivi ope*. Malta, 1762; A. Creni: *Responsio ad epistolam in Tractatu physico-medico*. Catania, 1764.

58. M.A. Grima: *Della medicina traumatica altrimenti detta vulneraria*. Firenze, 1773, p.61

59. P. Cassar, 1964: *op. cit.*, p.232

60. G. Bonello: Knights and Courtesans. *The Times [of Malta]*. 10th December 2000, p.48-49

paralysed through the overuse of mercury.⁶⁰

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*".⁶¹ 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, quelque-fois dix ans, sans y paroître; mais quand elle y existe, elle est meurtriere, et fait de grande ravages*".⁶² 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.⁶³

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.⁶⁴ 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.⁶⁵ In an attempt at controlling the spread of this disease in the fortified cities, General Vaubois on the 16th December 1798 proclaimed that "*toutes les femmes dont les maris sont absents, les veuves et les filles faisant la metier de tricoteuses, fileuses, blanchisseuses ou coutouriere, se rendront demain a` une heure apres-midi avec leurs effets, savoir celles de la cite' de l'ouest (don't la Florianna fait partie) sur la place de la liberte', et celles de la cite' de l'est chez le commandant, elles seront conduites de suite aux portes et mises dehors*".⁶⁶ By banishing all women

61. *Nouvelle Relation d'un Voyage et description exacte del'isle de Maltbe*. Paris, 1679, p.169

62. [C.E.] Robert: *Memoire sur la topographie physique et medicale de Malte, suivi de l'histoire des malades qui ont regne dans cette ville parmi les troupes francaise, sur la fin de l'an 6, et pendant les annees 7 et 8*. P. Didotlaine, Paris, 1802, p.28

63. C. Savona-Ventura and J. Vella: Patho-anatomical realism in Mattia Preti's Art. *Treasures of Malta*, 2005 11(2):39-41

64. [C.E.] Robert, *op. cit.*, p.32-37

65. P. Cassar, 1964: *op. cit.*, p.63

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*" – an example of biological warfare!⁶⁷

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.⁶⁸ In 1834, syphilis accounted for three deaths (0.11% of total deaths registered that year).⁶⁹ 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 120.⁷⁰ 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.⁷¹ The risk of acquiring syphilis by midwives during vaginal examinations was commented upon by the medical journal *La Salute Pubblica* in 1897. It advised midwives to wash their hands

66. C.H. Vaubois: *Journal du Siege de Malte*. 1800, Les Archives Nationales, Paris: AF III 73. In: W. Hardman, *A History of Malta during the period of the French and British Occupations 1798 - 1815*.

Longmans, London, 1909, p.582

67. B. Ransijat: *Assedio e blocco di Malta*. Malta, 1843, p.119

68. P. Cassar, 1964: *op. cit.*, p.228

69. R. Montgomery Martin: *The British Colonial Library comprising a popular and authentic description of all the Colonies of the British Empire*. H.B. Bohn, London, 1837, Vol. vii, p.208

70. P. Cassar, 1964: *op. cit.*, p.229

carefully after examinations.⁷²

A dedicated Lock Hospital had been 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 again 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 Mghieret in 1910.⁷³ 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 1926.⁷⁴

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"*.⁷⁵ 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.⁷⁶ 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.⁷⁷

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 dis-

72. Le Levatrice. *La Salute Publica*, 10 November 1897, 1(15):p.3-4

73. P. Cassar, 1964: *op. cit.*, p.233-234

74. *Malta Government Gazette supplement*, 7th July 1927, p.941

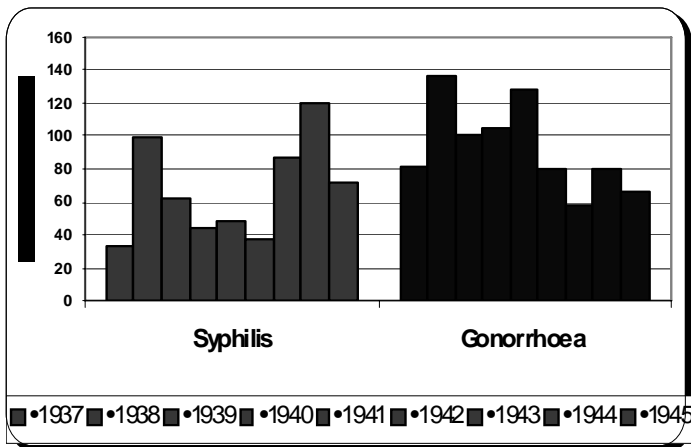
75. *Public Opinion*. 27th November 1888

76. *Malta Government Gazette supplement*, 21st May 1920, p.149; *Malta Government Gazette supplement*, 1st August 1930, p.977

77. *Malta Government Gazette supplement*, 29th July 1931, p.949; *Malta Government Gazette*, 31st August 1943, p.710

charged 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.⁷⁸

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 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).⁷⁹



Reported cases of venereal infection: 1937-1945

78. A. Galea: Office of the Charitable Institution. *Reports on the Working of Government Departments during the Financial Year 1922-23*. Government Printing Office, Malta, 1925, sec.Q: p.2, 11

79. V.M. Curmi: Report of the Medical officer in Charge of the Venereal and Dermatological Department, Central Hospital, for the year 1937. *Annual Report on the Health Conditions of the Maltese Islands and on the work of the Medical and health department for the year 1937*. Government Printing Office, Malta, 1938, App. MD, p.cxxxi-cxxxvi

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 regimens 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 such as urethral irrigations, electrolysis, ionization, diathermy, and urethral dilatation. Sulphonamides (Uleron and Dagenan) were soon to be identified as useful in both acute and chronic cases of gonorrhoea (1938-39)⁸⁰; while Penicillin became available for use in the Venereal Disease cases in 1945.⁸¹

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.⁸²

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 last decades have seen an increas-

80. V.M. Curmi, 1938: *ibid*; 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

81. 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-lxxx

82. V.M. Curmi, 1948: *ibid*.

ing rise in promiscuity with its attendant consequences of rising trends in out-of-wedlock pregnancies and venereal disease incidences.⁸³

Gynaecological management

In 1871, the medical journal *Il Barth* accused some midwives of posing as doctors prescribing medicine for dysmenorrhoea and other complaints, besides pretending to correct uterine malposition.⁸⁴ 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 leucorrhoea.⁸⁵ 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 leucorrhoea, and for organic disease of the womb such as cancer.⁸⁶ 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 was apparently a frequently encountered problem. These were generally managed conservatively with opiates and fomentations, though faradism was introduced in the management of this condition in 1890.⁸⁷

On the 21st 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 10½ 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 tremulous complicated by ileus diagnosed as resulting from intestinal torsion. This was managed conservatively. The woman was discharged four

83. M. Mifsud, G.G. Buttigieg, C. Savona-Ventura and S. Delicata. Reproductive health in Malta.

The European Journal of Contraception and Reproductive Health Care, 2009, 14(4):249-257

84. Sulle levatrice. *Il Barth* 22 March 1873, Anno II(13): p.260-261

85. P. Cassar: Two centuries of medical prescription in Malta 1683-1882. *St Luke's Hospital Gazette*, 1969, 4(2):p.111

86. G.B. Schembri, 1896: *op. cit.*, p.106-108

87. C. Mifsud: Casi di Salpingo-ovarite curati colla elettricità. *La Rivista Medica*, 31 March 1890,

Anno I(2):4-5; C. Mifsud: Ascenso dell'utero. *La Rivista Medica*, 30 April 1890, Anno I(4):p.4-5

88. V. Vella: *op. cit.*; T. Zammit: Adenoma dell'ovario sinistro. Laparotomia-guarigione. Sarcoma fusocellulare intraaddominale. Laparotomia-guarigione. *La Rivista Medica*, 15 June 1891, Anno I (21):p.1-2

weeks after surgery. The histological diagnosis was that of a cystic adenoma of the ovary.⁸⁸

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.⁸⁹ 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 is 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.⁹⁰

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. Guze Ellul in papers read to the Camera Medica after 1930 presented a case of a Wertheim 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 that 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 1189 admissions of which 525 were operated upon. The mortality was only 12 cases, of which only seven were postoperative.⁹¹

The abdominal operations recorded during these two years included subtotal and total hysterectomies with/out salpingo-oophorectomies, Wertheim's radical hysterectomies, myomectomies, ovariectomies, 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-innervation of the ovary in the vulva was done and in some

89. Bardon S, 1804: *op. cit.*; S.L. Pisani: *op. cit.*, p.79-80 ; G.B. Schembri, 1896: *op. cit.*, p.68-69

90. G.B. Schembri, 1896: *ibid.*, p.108

91. J. Ellul, 1930: *op. cit.*; *Annual report.....1937: op. cit.*, p.119-126; *Annual report on the health conditions of the Maltese islands and on the work of the Medical and Health Department for the year 1938. Malta Government Gazette suppl.* 1939, 154:p.106-127

cases hormone preparation injections in the form of *Aestroform B* were given in attempts to prevent menopausal symptoms.⁹²

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. There appeared to be increasing reliance on pharmaceutical agents with the importation of *Fertilinets* (1948), *Climatone* tablets (1954), and *Multigland* (1956).⁹³

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*.⁹⁴ In the 1980s, with a better understanding of therapeutic regimens, hormone therapy once again gained in popularity. Specific effective non-hormonal management is also available in the management of osteoporosis.

Genital prolapse in the 1930s was generally managed with an anterior and posterior colpoperinorrhaphy 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 was 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.⁹⁵

92. *Annual Report.....1937, ibid; Annual Report.....1938, ibid*

93. *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; Chestpiece, Winter 1954, vol.1, no.10; *Chestpiece*, 1956, vol.1, no.12

94. E.S. Grech: Postmenopausal bleeding. *Chestpiece*, 1965, 1(17):31-34

95. *Annual Report.....1937, ibid; Annual Report.....1938, ibid*

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 before this being referred abroad. Cervical erosion was 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.⁹⁶

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.

Gynaecological investigation

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.

Histological and microbiological investigations into various disease states had been introduced into general practice towards the end of the 19th century. The ovarian tumour excised at laparotomy in 1891 was studied histologically and found to be a benign cystic adenoma of the ovary.⁹⁷ By 1930, the Clinical Laboratory was further carrying out cultures of urethral and vaginal swabs, and Wasserman reactions to help in the diagnosis of venereal disease.⁹⁸ By 1938, the Gynaecological department was further utilising the Zondek-Ascheim and Friedman tests to diagnose pregnancy; the Rubin's test for infertility; complement fixation tests such as Wasserman and Khan for syphilis, and tests for the gonococcus; and urethral, vaginal and cervical swabs for bacteriological studies. Histological investigations were also being undertaken.⁹⁹

96. *Annual Report.....1937, ibid; Annual Report.1938, ibid*

97. V. Vella: *op. cit.*; T. Zammit: *op. cit.*

98. *Reports on the workings of Government Departments during the financial year 1930-31.* Government Printing Office, Malta, 1932, p.R3-4

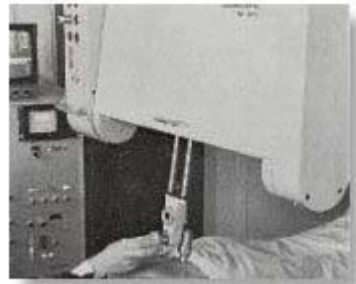
99. *Annual report.....1938: op. cit., p.127*

The Zondek-Ascheim test was the first gonadotrophin test for pregnancy described in 1927. It involved the twice daily subcutaneous injection of 0.3-0.5 ml of urine into immature female mice that are then sacrificed 100 hours after the first injection. The test was considered positive if corpora lutea were found in the ovaries. The Friedman's test followed similar principles except that a mature female rabbit was used. Rubin test for infertility was described in 1920 and involved injecting air or carbon dioxide through the cervix and uterus to see if the gas passes into the abdominal cavity as determined by pressure changes in the apparatus, auscultation for gas bubbling through the tubes, development of shoulder tip pain, or by radiological investigation looking for air under the diaphragm.

Technological advances led to the eventual introduction of diagnostic ultrasonography in 1972. The first ultrasound machine was a Disonograph NE4102 with three alternative display modes including an A-scan display, a cross-sectional display, and a time/position display. The introduction of computerised tomography and MRI in the diagnostic services provided by the radiology department further augmented the diagnostic capabilities.



The NE 4102



NE 4102 scanning gantry

The Disonograph NE4102

Reproductive Hormone Use in Malta

Introduction

The full elucidation of the physiology of the menstrual cycle with the understanding that ovulation occurred mid-cycle was made independently in 1930 by K. Ogino of Japan and H. Knaus of Austria. This discovery allowed for the development of the idea of an endocrine “orchestra” conducted by the pituitary gland. Endocrine glands and their extracts had however been previously studied, but their function had not been completely elucidated.

The first important experiments in reproductive endocrinology were made by Arnold Adolph Berthold in 1849. He showed that if a cock is castrated, its comb shrinks. This regression could be prevented by the implantation of the testis into any part of the body. Similar observations were made in female animals by the Austrian gynaecologist Emil Knauer in 1895 who showed that female sexual characteristics developed in castrated animals when the ovaries were transplanted. He also performed the first successful autotransplantation of an ovary in a rabbit. During the later years of the 19th century, it was also 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 by Rudolph Chrobak in 1895 in an attempt to treat the climacteric symptoms by oral administration of ovarian tissue.

The starting point of much of the modern work on sex hormones can be regarded to be the work of C.R. Stockard and G.N. 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; however the observation served to introduce an effective tool to determine the hormonal status of an individual. In 1923 Edgar Allen and E.A. Doisy demonstrated that injections of ovarian follicular fluid extracts caused specific changes in vaginal cells. They also developed a semi-quantitative bioassay test for oestrogenic activity. This led to a cascade of experimental discoveries leading first to determining the steroid structure of the reproductive hormones that served as the key to their isolation and eventual synthesis. The pharmaceutical company Schering was one of the leading supporters of

these research investigations.

In 1923-25, Walter Schoeller initiated research on oestrogens at Schering to demonstrate that hormones prevented ovulation in rabbits; and in 1927, the first oestrogenic preparation was extracted from animal placentae and marketed by Schering as Prodynon. Also in 1927, Selmar and Bernhard Zondek showed that urine of pregnant women contained large concentrations of oestrus-inducing compound. The different oestrogens were subsequently isolated. The American biochemist Edward Doisy isolated a crystalline form of oestrone in 1929; while during the subsequent years oestriol (1930) and oestradiol (1934) were also isolated. In 1932 oestradiol was synthesised from oestrone and in 1938 from cholesterol. This saw the development of orally active oestrogenic substances with Waleter Hohlweg in 1938 working with Schering developing ethinyloestradiol and Edward Charles Dodds developing Diethylstilbestrol.

Developments were also made in relation to other reproductive hormones. In 1931, the German biochemist Adolf Butenandt and Kurt Tscherning isolated the male hormones from urine; while the related substance dehydroandrosterone was identified in 1934. In 1935, testosterone was extracted from bulls' testis. In 1934, the Butenandt and his colleagues isolated progesterone. In further male hormone developments, the Swiss biochemist Leopold Ruzicka soon determined the structure of testosterone and in 1934 partly synthesized androsterone from cholesterol, after proposing its structure. This was the first synthesis of a sex hormone and the first proof of the relationship between cholesterol and sex hormones. Butenandt's group also showed that the sex hormones were related to cholesterol and bile acids, and in 1939 converted cholesterol into progesterone. For their work in demonstrating the structure of steroids, including the sex hormones, Ruzicka and Butenandt shared the 1939 Nobel Prize in chemistry. The gonadotrophins luteinizing hormone (LH) and follicle-stimulating hormone (FSH) were discovered by the American biochemists H. L. Fevold, F. L. Hisaw, and S. L. Leonard in 1931.

The research advances made in determining the structure of the steroid hormones and the establishment of a relationship to cholesterol led to advances in development techniques allowing commercial synthesis. In the 1930s, Austrian chemists were synthesizing male and female hormones from soybean sterols, which are cholesterol-like substances. This process was however expensive since it was difficult to effectively separate the sterols from each other. An easier method to separate the sterols was discovered by the American chemist Percy Julian, thus permitting the inexpensive synthesis of both progesterone and tes-

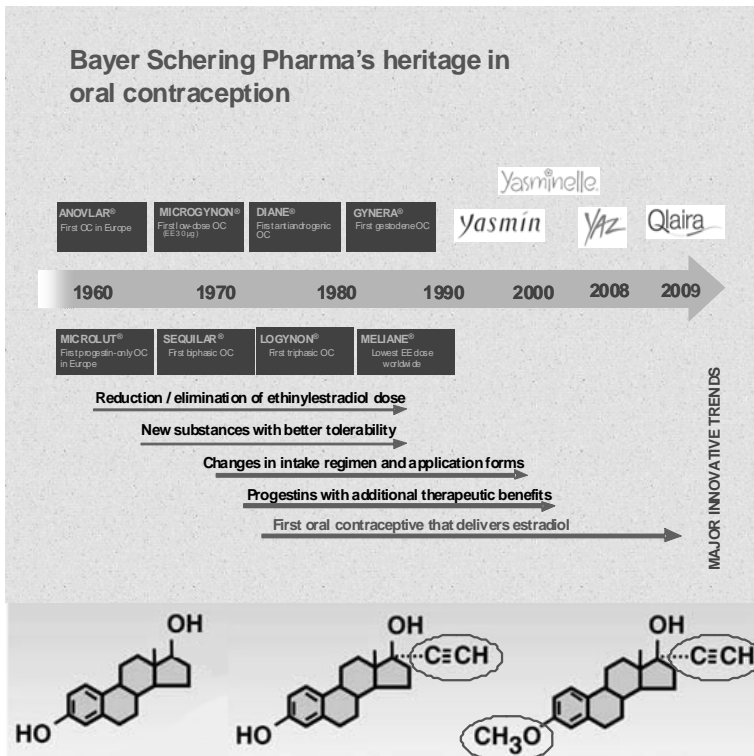
tosterone. The American chemist Carl Djerassi also reported a technique for synthesizing the oestrogens – oestrone and oestradiol – from plant materials.

The scientific understanding of the physiological roles of the reproductive hormones found clinical indications for use. In 1889, Brown-Sequard began his attempts at rejuvenation by injecting testicular extracts; while Villeneuve in Marseilles used the same method with ovarian extracts to control “hysteria” in women. These procedures were effective; but ovarian implantation and administration of extracts found an effective use in the management of menopausal symptoms after surgical castration. Testosterone is further administered by injection to treat men's sexual dysfunctions, such as impotence and low sperm counts. Reproductive hormones have thus found a clinical niche in the management of deficiency disorders related to menopause and infertility. In 1941, the American surgeon Charles Huggins was the first researcher to attempt to use hormones in the treatment of malignancy treating prostate cancer with female sex hormones. For his work, Huggins received the 1966 Nobel Prize in medicine. Today both male and female hormones are used to treat many kinds of endocrine-sensitive malignancy.

The availability of oestrogen extracts led to the concept of using hormonal manipulation to control fertility. Drs. Ludwig Haberlandt and Otfried Otto Fellner independently in 1922 reported their works with inducing sterility using oestrogen extracts. Progesterone was found to also produce an anovulatory state in 1937. These investigations led to the development of the first orally active progestational agent by the Schering scientist Hans H. Inhoffen just before the beginning of World War II. Further development in steroid chemistry led to the development of effective progestational compounds by Drs Carl Djerassi [norethindrone] and Dr. Frank Colton [norethynodrel], which were marketed in 1957. Oestrogen production proved to be more difficult and the hormone was extracted on a commercial scale from pregnant mares' urine. In 1954, Gregory Pincus, John Rock and Min-Chueh Chang 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 1961.¹⁰⁰ The subsequent history of the combined oral contraceptive pill has been a continuous drive to re-

100. G.J. Wlasich: The early history of the Pill. *Gynaecology Forum*, 2000, 5(4):p.12-16; W.H. Robertson: *An illustrated history of contraception*. Parthenon, Lancs, U.K., 1990.

duce the oestrogen dose and modify the progestational agents in attempts to reduce complications and side-effects while maintaining absolute effectiveness.



Oestrogens used in the combined contraceptive pill

Reproductive hormone replacement in Malta

Maltese medical physicians during the twentieth century maintained a close relationship to medical advances occurring on the European continent. Therapeutic options developed overseas were soon adopted and introduced locally. Prof. Guze Ellul in the early decades of the twentieth century [1937-38] had adopted the habit of auto-innervation of the ovary in the vulva whenever a bilateral salpingo-oophorectomy was performed in a young patient. In some cases hormone preparation injections in the form of *Aestroform B* were given in attempts

to prevent the problems of the menopause.¹⁰¹ This was given by hypodermic injection in a dose of 1000 rat units. *Aestroform B* or oestroform was a chemically pure preparation of the ovarian follicular hormone prepared for the market by British Drug Houses Ltd. It was available in ampoules for injection or in tablets for oral administration.¹⁰²

By 1947 at least, auto-innervation of the ovary seems to have fallen in disrepute.¹⁰³ 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.*¹⁰⁴ 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].¹⁰⁵ *Climatone* was a combined oestrogen-testosterone tablets incorporating ethinyloestradiol (0.01 mg) and methyltestosterone (5 mg). 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.*¹⁰⁶ In the 1980s, with a better understanding of therapeutic regimens, hormone therapy once again gained in popularity. Specific effective non-hormonal management is also available in the management of osteoporosis.

101. *Annual Report.....1937, ibid; Annual Report.....1938, ibid*

102. New Preparations – Crystalline ovarian follicular hormone. *British Medical Journal*, May 13, 1933, p.831

103. *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.

104. *Chestpiece*, October 1948, vol.1 no.1

105. *Chestpiece*, Winter 1954, vol.1, no.10; *Chestpiece*, 1956, vol.1, no.12

106. E.S. Grech: Postmenopausal bleeding. *Chestpiece*, 1965, 1(17):31-34

Hormonal contraception in Malta

Birth Control practices gained ground slowly in the latter half of the twentieth century. However hormonal medications to prevent pregnancy were rarely used. In 1966, a local gynaecologist referred 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".¹⁰⁷ Other Maltese doctors participating in the First European Congress of Catholic Doctors held in Malta in 1966 expressed similar views, particularly the use of the progestational agents to prolong the infertile period.¹⁰⁸

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 however only marketed for menstrual cycle control and not contraception.¹⁰⁹ 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 again being marketed as "progestogenic" cycle regulators rather than contraceptive agents.¹¹⁰

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 1970.¹¹¹ 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.¹¹² 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

107. L.J. German: Medical problems of Catholic Family planning. In: A. Gerada, A. Galea, and F.F. Fenech (editors): *The Catholic Doctor and his apostolate within the family. Proceedings of the First European Congress of Catholic Doctors*. MAM, Malta, 1966, p.169-170

108. E.A. Agius: Medical Problems of Catholic Family Planning; L. Spiteri: The Use of the Pill. In: A. Gerada et al., 1966: *op. cit.*, p.172-175

109. *St. Luke's Hospital Gazette*, 1967, 2(1); *St. Luke's Hospital Gazette*, 1968, 3(1)

110. *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

111. M.G. Elder: The problematic pill. *Chestpiece*, n.d.[1972], 25:p.5-9; 12

112. *Chestpiece*, n.d.[1972], 25:p.12; *St. Luke's Hospital Gazette*, 1973, 8(1)

women under 45 years of age, only 2% of these women reported using the oral contraceptive pill for family control.¹¹³ In spite of a progressively increasing awareness of the methods of family control, only 5.5% of puerperal women in 1983 were planning to use hormonal intervention to prevent another pregnancy.¹¹⁴

In 1988, 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.¹¹⁵ 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. This academic approach towards medicinal promotion was maintained in the late 1970s and 1980s by the Schering representative in Malta through the general distribution of the Schering (9th Edition, 1977) "*Pharmaceutical Specialities and Suggestions for Dosage*" which reviewed all the hormonal preparations marketed by Schering and detailed their indications and usage. A detailed review of the oral contraceptives in use in Malta appeared in the medical student journal in 1989.¹¹⁶ By 1993, oral hormonal contraceptives were the method of choice chosen by 15.8% of the female population.¹¹⁷

Infertility management in Malta

The use of reproductive hormones targeted either deficiency situations or for contraception. Another use of these hormones was to promote and assist ovulation and sperm production in infertile couples.

During the 1970s, the only effective pharmacological agent available to Maltese clinicians for use as ovulatory agents included clomiphene [Clomid] and human chorionic gonadotrophin [Primogonyl]. Clomiphene is an anti-oestrogen that acts predominantly on the hypothalamus increasing the secretion of natural FSH

113. R.G. Milne: Family Planning in Malta. *Population studies*, 27(2):p.373-386, 1973

114. C. Savona-Ventura: The influence of the Roman Catholic Church on Midwifery practice in Malta. *Medical History*, 1995, 39:18-34

115. *Maltese Medical Journal*, 1988/89, 1(1):p.49; *Maltese Medical Journal* 1989, 1(3):p.50

116. C. Savona-Ventura: Rational prescribing of oral contraceptives. *Medi-Scope*, 1989, 13:p.23-28. See also C. Savona-Ventura: Precautions before prescribing the pill. *Malta Prescribers Review*, 1988, 7:p.2-3

117. R.G. Milne and R.E. Wright: Changing pattern of contraceptive use in Malta. *Economic & Social Studies*, 1993-94, 7:p.1-7

and LH; while human chorionic gonadotrophin is a placental gonadotrophin that has close properties to LH. Prof. Arthur P. Camilleri reported the use of these agents in a series of 86 Maltese women with ovulation dysfunction causing infertility during 1969-1975. Hormonal treatment resulted in 52 pregnancies.¹¹⁸ The human pituitary gonadotrophins were introduced in Maltese infertility treatment during the 1980s in the form of Pergonal prepared from the human urine from menopausal women and contains the two gonadotropin hormones LH and FSH. Indiscriminate use led to an increase in higher order births, an observation that led the Malta College of Obstetricians and Gynaecologists in 1992 to advise the health authorities to consider restricting the use of these medications by qualified gynaecologists alone.¹¹⁹



Prof. A. P. Camilleri

Attempts at influencing sperm production were made initially through the administration of testosterone [Testoviron] but while this hormone is indispensable for the function of the accessory sex glands and the normal progress of spermatogenesis, it had a negative feedback response on the hypothalamus decreasing FSH level necessary to promote spermatogenesis. Mesterolone [Proviron] has less negative feedback effects. The serum gonadotropin preparation Anterone was also indicated to promote spermatogenesis. These substances were made available by Schering in the Maltese market during the 1970s. The anti-androgen cyproterone acetate [Androcur] was also available.¹²⁰

118. A.P. Camilleri: A realistic approach to infertility. *Practitioner*. 1980; 224(1346):p.835-837

119. C. Savona-Ventura, A. Vella, and K. Zammit: Temporal trends in multiple pregnancy trends in the Maltese Islands. *International Journal of Risk & Safety in Medicine*, 2006, 18(3):173-179

120. *Pharmaceutical Specialities and Suggestions for Dosage*. Schering AG, Berlin, 9th edition, 1977

Gynaecological collection

Introduction

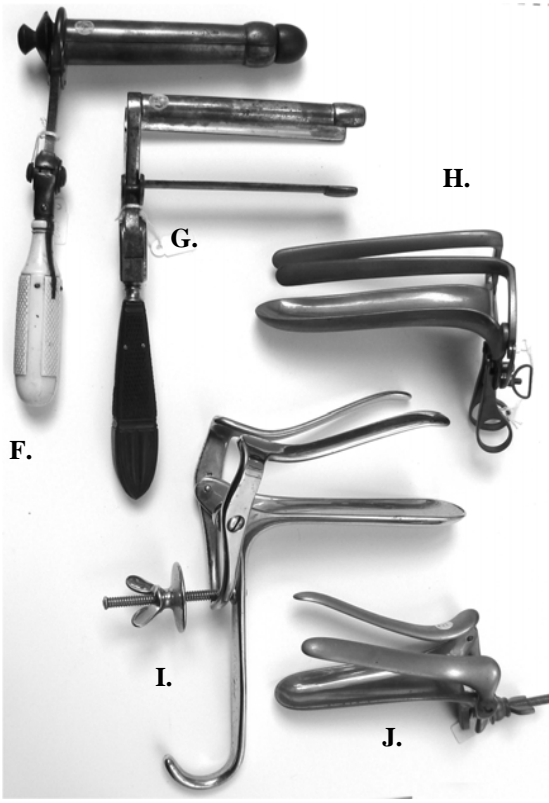
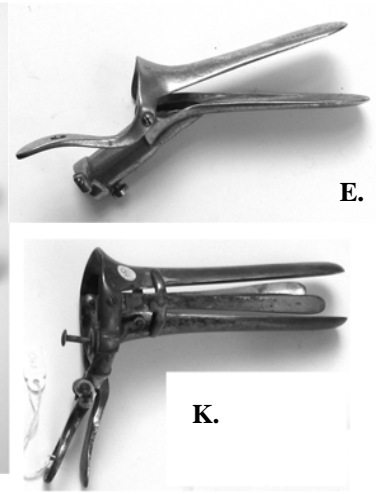
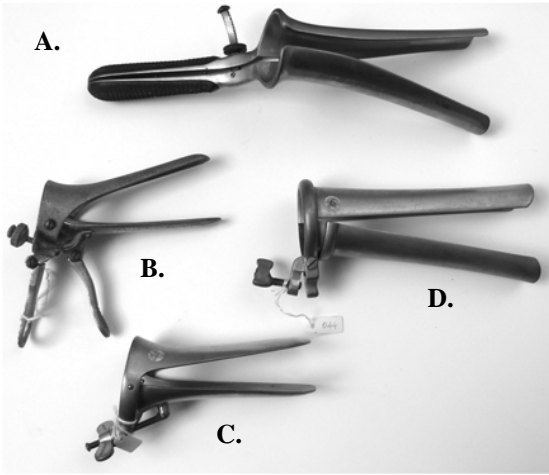
The Faculty of Medicine and Surgery of the University of Malta has a number of historical items pertaining to the practice of gynaecology. These are held in the Faculty collection of medical instruments at the Medical School at Mater Dei University Hospital.¹²¹

Specula for vaginal examination

Vaginal specula have been in use since the Classical Period being used by the ancient Greeks and Romans. A tomb-slab from Malta dated to the second century AD depicting a series of surgical instruments includes a two-bladed vaginal speculum very similar to first century specimen excavated from Pompeii. In the modern era, the multi-bladed speculum followed the development of the bivalve speculum in the eighteenth century by Heisler in 1768 and Brambilla in 1782. Further developments on design along similar lines were introduced by Cusco, Rizzoli, Chanier and Trelat. In the 19th century it was believed that flexibility and efficiency of speculum was dependent on the number of blades. Consequently, David Davis in 1830, introduced a four-bladed instrument with a fitting plug, initially made of wood and later of vulcanite. Plum and Weiss invented a three-bladed dilator which was operated by a screw in the handle and was recommended for both vaginal and rectal examinations.

The tubular vaginal speculum was of similar antiquity. The French surgeon Joseph Récamier in 1801 introduced his vaginal speculum which was a slender five inch long tin tube that he used to introduce treatment for cervical ulcers. Later he widened the pewter conical tube to inspect the cervix. The obturator was made from ebony. This was the first of a series of tubular specula. In 1855, Robert Ferguson introduced his tubular glass vaginal speculum mirrored on the inside and black coated externally. This speculum continued to be used through the 20th century being constructed of metal throughout.

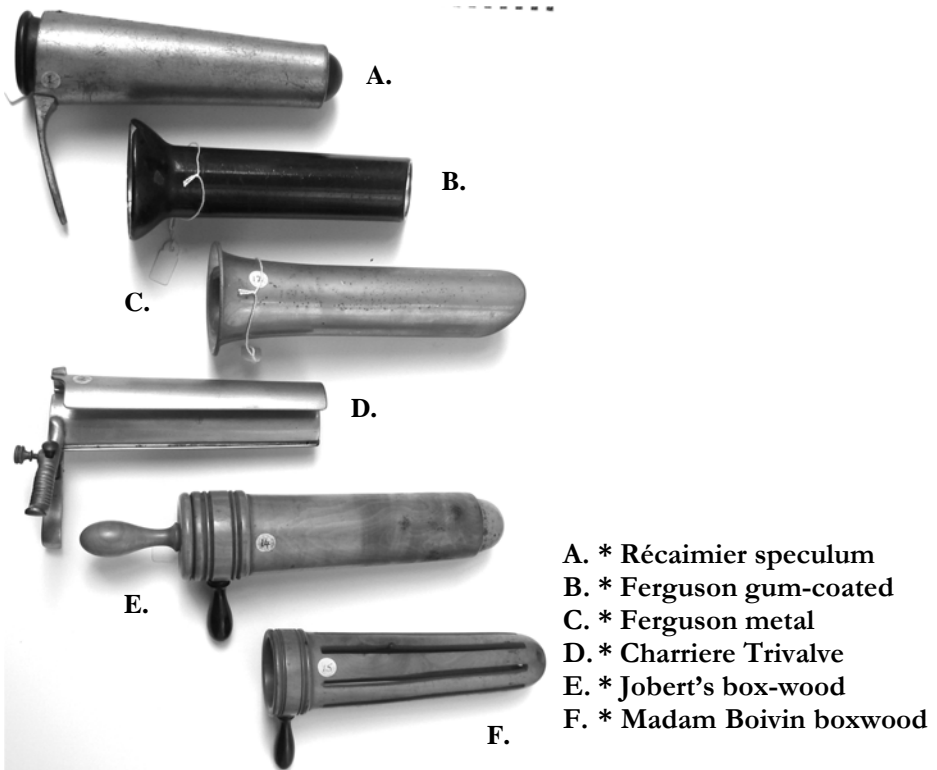
121. These items were generally donated by a number of Maltese medical practitioners or their families. A core collection was donated by the Wellcome Medical History Museum of London in the 1970s. The latter are identified in the text by an asterisk [*], the others by the sign #. The collection also holds the carrying pouch for specula belonging to Prof. Joseph Ellul.

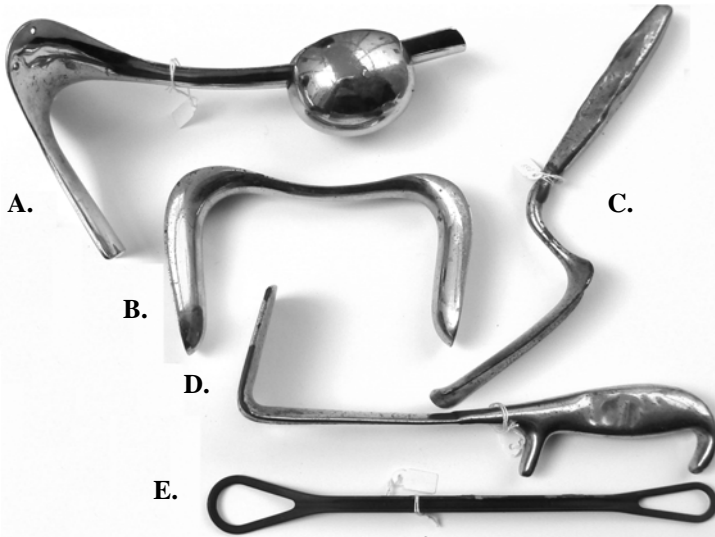


- A.* Ricord 2-bladed speculum with ebony handles [dated c.1840s]
- B.# Cuscos 2-bladed speculum
- C.* Cuscos 2-bladed John Weiss screw lever
- D.* Coxeter 2-bladed tubular; screw-lever with obturator
- E.# Cuscos 2-bladed with light source
- F.* Plum three-bladed with obturator and ivory handle [dated c.1830s]
- G.* Nott three-bladed with ebony handle
- H.* Meadow three-bladed
- I.# Meadow three-bladed with different screw lever
- J.* John Weiss three-bladed [dated c.1870s]
- K.* Meadow four-bladed [dated c.1870s]

Other forms of tubular forms of vaginal specula were constructed from box-wood. Examples in the Medical School collection include the Jobert de Lamballe's speculum with obturator used to introduce leeches onto the cervix [c.1880], and Madame Marie Gillain Boivin's bath speculum. A unique design of a tubular vaginal speculum with an ebony obturator [missing in held specimen] was the Charriere Trivalve Speculum as modified by Dupuytren introduced in 1837. The instrument features a unique hinged-tube that is inserted as an almond-shaped oval and expands to a full circle by pressing the two finger grips together.

The year 1845 saw the introduction by Marion Sims of the single-bladed vaginal speculum designed for the purposes of facilitating surgery on the vaginal walls. This led to the development of related single-bladed specula and retractors.

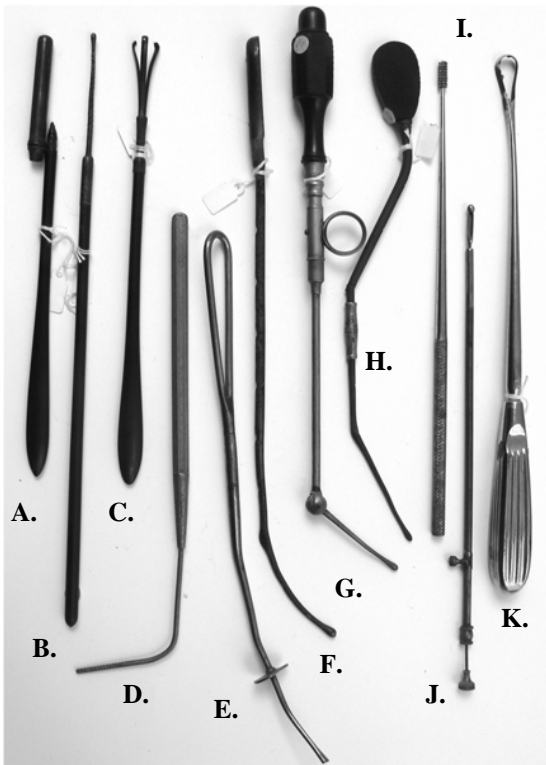




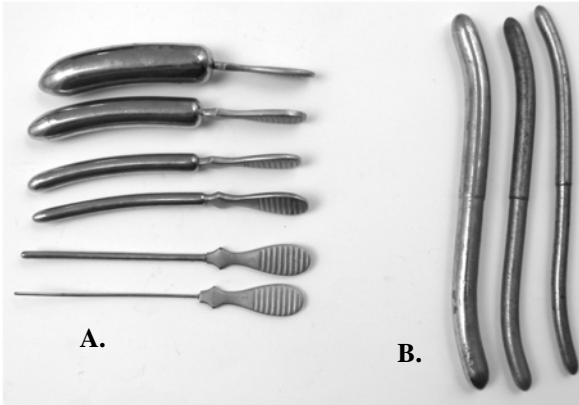
- A. * Sims double-ended speculum
- B. # Auvard speculum with fixed weight
- C. # Roques retractor for the lateral vaginal walls
- D. # Doyen retractor
- E. # Gervis vaginal wall depressor
- F. * Simpson's metrotome
- G. * Greenhelgh's bilateral metrotome
- H. # Simon's ecraseur
- I. # Lewer's uterine vulsellum lateral curve, 2x2 teeth
- J. # Ramsey's uterine vulsellum

Gynaecological surgical instruments

Before the advent of effective anaesthesia and the introduction of the aseptic technique in surgical practice in the latter part of the 19th century, the scope of gynaecological surgery was rather limited to local procedures performed in the accessible genital tract. The scissor-like metrotome was introduced into practice by Sir James Young Simpson in 1860 to help divide the cervix in cases of cervical stenosis thought to be the cause of painful menstrual cramps and infertility. Cervical dilators were also used for these indications but were also introduced to enable surgical access to the uterine cavity. Intrauterine surgery using different probing instruments was undertaken in an attempt to control abnormal uterine bleeding. Suitable access for this type of management increasingly relied upon cervical dilatation using the aids mentioned above. The cervix was more easily accessible, and cervical lesions often causing leucorrhoea or blood stained discharge were managed by local destructive therapy such as the use of chemical cautery using a silver nitrate stick. With the development of microscopical studies to assess the pathological cause for disorders, the use of some of these instruments was extended to obtain endometrial samples to assist in diagnosis.



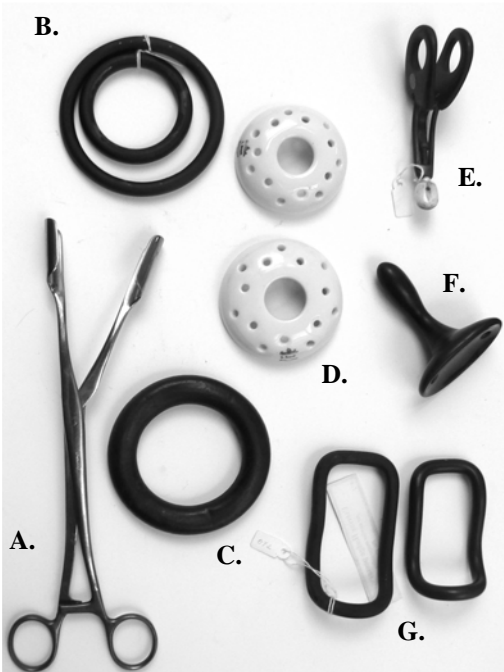
- A. * Uterine Caustic holder
- B. * Hall's scarifying lancet
- C. * Uterine sponge holder with ebony handle and # with metal handle.
- D. # Sponge holder
- E. # Uterine sound/ manipulator
- F. * Simpson's uterine sound
- G. * Playfair's uterine probe
- H. * Simpson's uterine sound jointed for portability
- I. # Uterine curette
- J. # Uterine aspiration curette
- K. # Sims Uterine curette



A.# Hawkin's-Ambler's dilator set for cervical dilatation

B.# Hegar dilators

A major concern in woman's health was the problem of genital prolapse. Various devices have been designed to assist the management of genital prolapse and uterine malpresentations, these being inserted into the vagina. The ecraseur or uterine guillotine was introduced into practice by Gustav Simon in 1850. This steel instrument with a tightening chain mechanism was used to cause cervical necrotic amputation in cases of cervical cancer or uterine prolapse.



A.# Shaw's introducing forceps for vaginal ring pessaries

B.# Uterine ring pessary sizes 62&90, for uterine prolapse

C.# Watch spring pessary for uterine prolapse

D.# Shaatz pessary

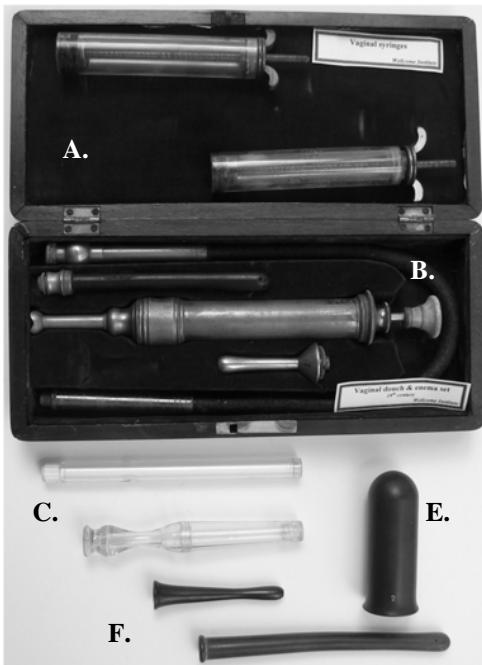
E.* Sims uterine elevator for uterine prolapse

F.# Simpson's cup and stem pessary

G.# Uterine Hodge pessary for uterine malposition

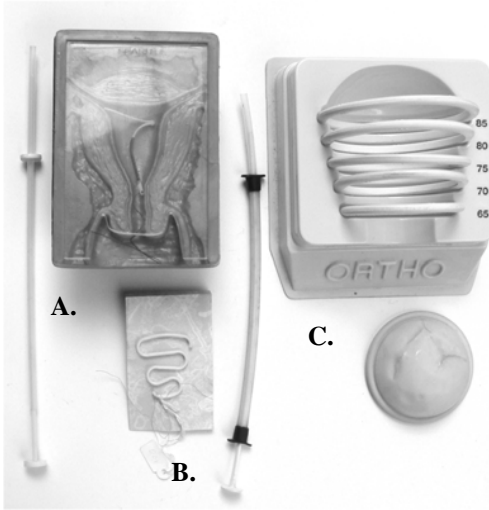
The prevention of pregnancy was an ongoing concern particularly in the latter half of the 20th century. Post-coital vaginal douches were applied using various solutions in an attempt towards immobilizing the spermatozoa; though douches were more commonly utilized for maintaining vaginal hygiene and in the management of vaginal infections required syringes to douche the vagina. Prof. G.B. Schembri is known to have advised vaginal irrigations with warm water and borax for hives and other infectious vaginal discharge, for an abundant fetid leucorrhoea, and for organic disease of the womb such as cancer.¹²² Barrier methods of contraception were introduced in Malta in the 1970s.

The contraceptive diaphragm was marketed by Ortho in the 1980s being further made available by the government-sponsored contraception clinics. Various forms of intra-uterine devices were introduced first in the 1970s using the Lippes loop or the Copper-based IUCDs. The 2000s saw the introduction of the progesterone-carrying IUS Mirena®.



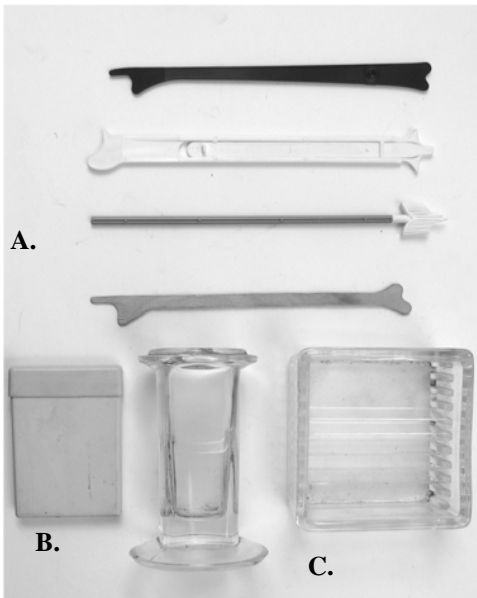
- A.* Vaginal syringes dated 19th century
- B.* Vaginal douche and enema set dated 19th century.
- C. Syringes for applying vaginal creams
- D. Douche & enema nozzles
- E. Vaginal dilator

122. G.B. Schembri: *The Midwife's Guide book*. Government Printing Office, Malta, 1896, p.106-108



- A. # Copper-7 intrauterine contraceptive device [dated 1990s] in demonstration model
- B. # Lippes' loop with applicator intrauterine contraceptive device [dated 1960s]
- C. # Contraceptive diaphragm with Ortho ® measuring rings

The cervical smear sampling technique was originally invented by Georgios Papanokolaou in 1928 originally for the detection of the cyclical hormonal changes in the vaginal cells, being developed into a cancer screening test in 1941. The collection contains a number of cervical cervical smear sampling devices; slide container and staining trays.



- A. # various models for cervical sampling
- B. # cervical slide transport container
- C. # slide staining containers

Disease in all its facets has affected mankind throughout his existence. The species attempts towards achieving good health and longevity has required a continuous effort towards developing an understanding of disease pathophysiology and therapeutics. The practice of medicine is in a continuous state of evolutionary process, with today's advances being considered outdated and outmoded tomorrow.

The present publication recounts the events and changes that have taken place over the centuries in the patterns and management of disease specifically affecting women. Gynaecological problems, particularly those related to venereal disease, have a long history in Maltese society. Effective management only came after the advances made in physiology, pharmaceuticals and surgery - a process that only started in the latter part of the nineteenth century. The local professionals in the field kept abreast with the advances being made on the continent and quickly adopted these new diagnostic and therapeutic tools in their clinical practice. By searching for the historical roots of gynaecological care concepts, the publication hopefully facilitates a closer understanding of current practice.

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